

National Council of University
Research Administrators



SAN DIEGO STATE UNIVERSITY

NCURA PEER REVIEW

FINAL REPORT

JULY 18, 2011



National Council of University Research Administrators
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ABOUT THIS REPORT

The National Council of University Research Administrators (NCURA) is a national organization of over 7,000 members. NCURA serves its members and advances the field of research administration through education and professional development programs, the sharing of knowledge and experience, and by fostering a professional collegial, and respected community.

This document focuses on sharing knowledge and experience as a result of the recently conducted review of the research administration area of sponsored programs. Our objectives are to provide the institution with feedback on the institution's management in support of research and to share some national best practices that might be considered at the institution.

While the review utilizes the NCURA National Standards, the reviewers recognize that policies and practices vary at institutions and that not all Standards are applicable to each institution.

The NCURA peer review does not evaluate personnel, nor does it perform an audit function. The results of this review, therefore, cannot assure fiscal, regulatory, or ethical compliance with federal, state, or local regulations. The recommendations offered in this review report should not be construed as an exhaustive list as these recommendations necessarily represent an analysis by a particular set of reviewers and at a single point in time. A decision by an institution not to adopt one or more recommendations does not, in any way, mean that the institution is failing to meet legal requirements. Rather, the recommendations reflect an opinion by nationally recognized research administrators who may not be fully cognizant of local history, environment, or decisions. This document does not provide legal advice. NCURA does not warrant that the information discussed in this report is legally sufficient.

- The **Executive Summary** provides an overview of the report and a listing of all the recommendations in abbreviated form.
- The **Background, Charge, and Approach** lays out the charge to the reviewers and the approach utilized during the peer review.
- The section on **National Standards for Sponsored Projects Operations** provides an overview of the National Standards utilized for the review (the complete listing of National Standards appears as an appendix).
- The **Current Environment for Sponsored Programs at Research Universities** section discusses the many influences and pressures that have recently impacted research administration and created some of the current stresses.
- The remaining two sections on **Institutional Infrastructure** and **Core Operations** provide a detailed discussion of these areas followed by a set of recommendations and rationale for the recommendation being made.

NCURA will treat the contents of this report as confidential and will not disclose nor distribute the report outside individuals affiliated with the peer review program. There are no such restrictions on how the institution chooses to utilize the report.

San Diego State University

NCURA PEER REVIEW

EXECUTIVE SUMMARY

An evaluation of the research administration infrastructure at the San Diego State University was conducted at the request of Thomas Scott, Vice President for Research. The evaluation was performed in April, 2011 (site visit on April 24-26, 2011 by a Peer Review Team from the National Council of University Research Administrators.

The evaluation covered the Institutional Infrastructure and Core Operations of the National Standards for research administration. The review assessed the following broad areas:

- 1) **Institutional Infrastructure**, consisting of Organizational Structure; Communication, Outreach, and Education; Compliance and Risk Assessment; and Electronic Research Administration
- 2) **Core Operations**, consisting of Proposal Services; Award Acceptance and Initiation; Award Management; and Research Ethics

This report was based on information provided to the Review Team prior to the site visit, meetings with individuals during the site visit, and post-site visit communications to clarify information. Processes may have changed subsequent to the site visit and are not reflected in this report.

The NCURA Peer Review Program performs a review of the effectiveness of the sponsored programs operation using National Standards. The program does not perform an audit function. The results of this review, therefore, cannot assure fiscal, regulatory, or ethical compliance with federal, state, or local regulations. Additionally, the program does not evaluate personnel.

The recommendations are listed here in abbreviated form. They appear in the order that they are discussed in the report. A more complete description and rationale for each recommendation below appears in the Recommendations section in the body of this report.

Organizational Structure

NCURA Standard II.A.i. Operational Structure

- **Recommendation: The President and the Vice President for Research need to carefully assess the roles and functions that currently reside in the Foundation and determine which of these should be moved to the University in order to be closely vested with the Vice President for Research, as the individual who is responsible for articulating and moving forward the research priorities for the University. How recommendations move**

from the University committees to the Foundation should be clearly defined and transparent to all stakeholders.

- **Recommendation:** In clarifying the role of research, the Vice President for Research should engage the academic deans, center and institute directors, and faculty in defining a written strategic plan for research.
- **Recommendation:** As the University clarifies where the role and driver for research resides, the President and the Vice President for Research need to define how expectations and directions are conveyed to the Foundation. During this process, the presence of Foundation staff on University decision-making committees should be carefully assessed as to need and purpose.
- **Recommendation:** To clarify the responsibility for promoting research, the VPR and the SDSU Marketing and Communication Office should develop a strategic marketing plan that will brand and extend the SDSU research story.
- **Recommendation:** The Foundation should provide a detailed list of specific functions and responsibilities offered in each of the sponsored programs offices and make this listing available to all PIs.
- **Recommendation:** The existing model of satellite operations for sponsored program services should be closely examined to determine if extending the model will enhance access and partnership between PIs and sponsored programs staff.
- **Recommendation:** SDSU should consider establishing the diving safety program as a University-level function and place the activity under the Division of Research Affairs.
- **Recommendation:** As animal research continues to grow, SDSU should anticipate centralizing the animal care facility under the Vice President for Research.

NCURA Standard II.A.ii. Staffing and Resources

- **Recommendation:** SRS should utilize a communications consultant to provide overall training to all staff in communication and customer service skills.
- **Recommendation:** The Foundation needs to critically analyze the underlying reasons for the high level of staff departures and identify mechanisms for improving staff retention.
- **Recommendation:** The Sponsored Programs Services should critically assess the role of the checklists and multiple reviews as relates to the training process of staff. Appropriate authorities should be assigned to staff as experience and performance goals are met.
- **Recommendation:** The Foundation should immediately implement a central “hotline” for faculty to utilize if sponsored program-related issues are not addressed by normal processes. Such a hotline should be staffed by several full-time experienced research

administrators who can respond knowledgeably to issues as they are brought forward. A faculty committee should participate in analyzing data and collaborate with the Foundation in identifying operational improvements and faculty educational programs that are a result of the analysis.

- **Recommendation:** The Vice President for Research should review peer and aspirational peer institutional organizational structures for potential staffing models for senior positions such as an Assistant or Associate Vice President for Research.
- **Recommendation:** In considering the future growth of research and the continued evolution of research administration tools and systems, the VPR should consider the value of a dedicated full time IT position to provide research support.

NCURA Standard II.B.i. Communication and Outreach

- **Recommendation:** Individual policies of SDSURF should be assembled and posted prominently on the SDSURF home page.
- **Recommendation:** The DRA and the SDSURF Office of Communications should immediately initiate a communication program for the regulatory compliance areas.
- **Recommendation:** The VPR should begin to engage, as a group, the deans and the directors of research centers and institutes in discussions of research issues on a regular basis.
- **Recommendation:** A simple web-based process should be established for faculty to provide suggestions or feedback on service and staff performance for all units within SDSURF and DRA. Links should be included in correspondence to PIs related to proposals, awards, compliance committees and financial reports.
- **Recommendation:** The Vice President for Research and the Deans of the academic colleges should hold open forums for faculty in their colleges to enable discussion of sponsored program issues.
- **Recommendation:** A faculty research policy and/or advisory committee should immediately be defined (or more clearly defined for the existing URC), serve under a faculty Chair, and meet monthly with the Vice President for Research with a focus to discuss research policy and other research-related issues that impact the research enterprise.
- **Recommendation:** SDSURF and DRA supervisors should educate staff on the faculty perspective of research administration, emphasize prompt communications with faculty, and provide practical training on customer service.
- **Recommendation:** The VPR should work with the Department of Marketing and Communications to develop a communications strategy for extending the visibility of SDSU research.

- **Recommendation:** The VPR and the URC should engage primary stakeholders in discussions concerning research activity report needs. A communications consultant should serve as a resource to assist in an overall internal communications plan.

NCURA Standard II.B.ii. Education

- **Notable Practice:** The "Professors helping Professors" (PhP) program was initiated by the President to assist junior and senior faculty in obtaining extramural funding.
- **Recommendation:** IRB staff should expand the face-to-face training program to reach all personnel (faculty, students and staff) who perform human subject research in order to augment the existing web-based tutorial.
- **Notable Practice:** The NIH-funded Training in Research Ethics and Standards (TRES) is culturally tailored, content-appropriate, Spanish-translated research ethics curriculum that targets Community Health Advisors/*promotores* (members of the research team who have direct involvement in research conducted within the Hispanic/Latino communities).
- **Notable Practice:** The DRA website offers an NIH-funded, web-based tutorial focusing on Basic Research Concepts.

NCURA Standard II.C.i. Compliance and Risk Assessment

- **Recommendation:** SDSU should establish processes for: 1) the management of new compliance requirements, including dissemination of such requirements to faculty and staff and 2) the education and outreach requirements that may be associated with new or changing rules and regulations.
- **Recommendation:** New compliance procedures need to be addressed within institutional policies, education and outreach programs, and compliance reviews, as appropriate.
- **Recommendation:** Policies and procedures in the area of data security and data security plans need to be developed, implemented and disseminated to the faculty through the Division of Research Affairs.
- **Recommendation:** The IP Policy of SDSU needs to be updated to reflect recent Court rulings.

NCURA Standard II.D.i. Electronic Research Administration

- Covered under each Core Operations section.

Proposal Services

NCURA Standards 1.A.i Collection and Dissemination of Funding Information

- **Recommendation:** The Office of Communications should assess the level of effort expended to match opportunities with their faculty profile system with the efficiencies gained by replacing that effort with the SPIN system.
- **Recommendation:** The VPR, in collaboration with the University Research Council, should explore with faculty the value and impact of the current mechanisms used to disseminate funding information.

NCURA Standards 1.A.ii Proposal Development and Assistance

- **Recommendation:** Budget spreadsheets for each major federal agency and for non-federal sponsors should be developed immediately and implemented with staff. Template spreadsheets should be available to faculty to utilize.
- **Recommendation:** The VPR and Deans should explore mechanisms to supplement the "Professors helping Professors" program with the intent to provide all faculty new to proposal writing with an effective networking system and access to educational offerings about proposal writing.

NCURA Standards 1.A.iii - Proposal Review and Submission

- **Recommendation:** The decision for voluntary F&A waivers should reside with the Vice President for Research with rationale and a request for approval submitted through the Deans and that process should be clearly communicated to staff, faculty, and Deans.
- **Recommendation:** The VPR should critically assess the process and priorities for funds allocated to support cost sharing and how use of those funds could be aligned strategically with proposals that will move forward the research vision and direction.
- **Recommendation:** SRD should develop education, training, and guidance for all staff on the competitive bid process for proposals (RFPs, RFBs, RFQs) and a process that will include critical review of terms and conditions prior to proposal submission.
- **Recommendation:** The VPR, Deans, and SRS need to collectively communicate the expectation for final proposals to be received prior to the submission deadline and a clear explanation as to the review process and need for the institution to understand and stand behind all commitments made in proposals.
- **Recommendation:** DRA and SRD need to assess critically the multiple reviews and identify how the process might be streamlined by shared checklists, delegation of signature, or other techniques that will simplify the review process.
- **Recommendation:** Representatives from SDSURF and DRA should examine their roles and responsibilities in order to streamline the proposal review process.

- **Recommendation:** Authority to review and approve proposals should be delegated to a lower level within the SRD organization when staff demonstrate proficiency.
- **Recommendation:** SDSURF should aggressively pursue implementation of an electronic proposal routing system to improve work flow.

NCURA Standards 1.A.iv Collaborative Project Development

- **Recommendation:** SRD should explore models at peer institutions as relates to implementing MOUs or commitment letters on multi-disciplinary proposals at the pre-proposal stage.

NCURA Standard 1.A.v. Agency Liaison

- **Recommendation:** None

Award Acceptance and Initiation

- **Recommendation:** SDSURF and DRA should investigate software that would allow data from regulatory committees to populate proposal and award records.
- **Recommendation:** SDSURF should closely examine PI Profile in order to better meet the expectations of the PIs and center directors.

NCURA Standards 1.B.i. Review and Negotiation of Terms and Conditions

- **Recommendation:** SDSURF should identify the issues referred to outside counsel in the past to determine if they may be managed more effectively in the future.

NCURA Standards 1.B.ii. Ancillary Agreements Associated with Research Grants and Contracts

- **Recommendation:** The DRA and TTO websites should describe the transition of responsibilities from DRA (e.g., invention disclosure) to TTO (e.g., licensing) and include contacts for questions along that process.

NCURA Standards 1.B.iii. Subawards

- **Recommendation:** The Subaward Procedures should be revised to identify who will contact the sponsor to gain approval of an unapproved subrecipient.
- **Recommendation:** A system to track the pending subawards and subawards that are in process should be established

NCURA Standard 1.B.iv. Award Acceptance Process

- **Recommendation:** None.

NCURA Standard I.B.v. Award Activation and Notification

- **Recommendation:** None.

Award Management

NCURA Standards I.C.i. and C.ii Fiscal and Administrative Management

- **Recommendation:** In order to strengthen the relationships between sponsored programs support and the faculty, PIs should be provided the opportunity for input into the enhancement request process. We would encourage an “IT Focus Group” that could discuss the needs of the stakeholders and prioritize the enhancement requests.
- **Recommendation:** In order to strengthen the electronic research infrastructure, it is recommended that the RF consider the acquisition of a commercially available Effort Reporting solution.
- **Recommendation:** In order to strengthen the partnership between sponsored programs support and the faculty, the RF should consider greater transparency in the actual calculations of Research Support Fund (RSF) distribution to individual faculty members.
- **Recommendation:** Additional education of PIs on the procurement card program may be warranted
- **Recommendation:** As new staff are in the learning phase of their jobs, they could be paired with a more senior person to serve as their mentor and utilize that person to discuss questions that they are not sure how to handle.
- **Recommendation:** SDSU could consider the implementation of an electronic version of the Journal Voucher so that it could be completed on-line and then submitted to the appropriate approvers in order to enhance timeliness of processing into the financial system.

Research Ethics

NCURA Standard I.D.i. Project Integrity

- **Recommendation:** SDSU should assess the level of administrative support provided to the major compliance areas and provide a level of support that will guarantee that all requirements such as protocol submissions, review and monitoring are adequately managed.
- **Recommendation:** SDSU should update and post on the Division of Research Affairs website the most up to date information regarding policies and procedures for all committees.

- **Recommendation:** SDSU should annually review the operation and management of the compliance committees as well as their policies and procedures with faculty to obtain and utilize their input in order to enhance committee operations and increase faculty/PI satisfaction.
- **Recommendation:** SDSU should establish processes and procedures for 1) the management of new compliance requirements, including dissemination of such requirements to faculty and staff and 2) the education and outreach requirements that may be associated with new or changing rules and regulations.
- **Recommendation:** SDSU should invest in commercially available electronic systems for the routing, processing, and management of research related compliance committees, such as IRB, IACUC, IBC, and COI. There are many commercially available electronic products on the market to assist in the management of compliance related protocols and compliance committees.
- **Recommendation:** SDSU should place their policies and procedures for handling allegations of misconduct in science on the Division of Research Affairs web site.
- **Recommendation:** SDSU needs to establish a clearly articulated Responsible Conduct of Research (RCR) program.
- **Recommendation:** SDSU should develop through the Conflict of Interest Committee processes and procedures for yearly monitoring of approved PI COI management plans.
- **Recommendation:** SDSU through the COI Committee needs to develop processes and procedures for obtaining and reviewing PI consulting agreements prior to approval of a COI disclosure or COI management plan.
- **Recommendation:** SDSU through the COI Committee must disseminate to the IRB all IRB related COI management plans and updates to the management plans that it approves.

NCURA Standards I.D.ii Human and Animal Use

- **Recommendation:** SDSU needs to develop and implement a comprehensive Occupational Health Program that includes review of the medical questionnaire by a HIPPA certified individual and a process to refer all animal users, including faculty, staff and students who may need medical care in order to be able to work with animals to a physician(s).
- **Recommendation:** SDSU needs to develop detailed SOPs in all areas of animal care, house them together, and disseminate them to users.

- **Recommendation:** While some DEA agents have different perspectives and might be directing institutions differently, SDSU should look into their use of a single DEA license for all researchers using animals.
- **Recommendation:** SDSU should designate one of the three IRB specialists as either the lead specialist or the IRB manager, allowing faculty to clearly know who administratively manages the IRB.
- **Recommendation:** SDSU should either devote the resources necessary to significantly update the existing IRB electronic system or invest in a commercially available IRB electronic system.
- **Recommendation:** The IRB at SDSU should develop and implement processes and procedures to continuously monitor IRB protocols.
- **Recommendation:** The IRB and COI committees at SDSU should develop a process to ensure sharing of conflict of interest management plans proposed by a researcher who is using human participants in his/her research. These management plans should be provided to the IRB prior to protocol review by the IRB.
- **Recommendation:** SDSU should make sure that the Director of DRA is not a voting member of the IRB.
- **Recommendation:** SDSU should require that at least one member, if not all members, of the IRB staff be nationally certified and attend PRIM&R or other organizations that can provide the most current information concerning the use of humans in research.

NCURA Standards I.D.iii Biohazards, Radiation Safety, Bioterrorism

- **Recommendation:** A faculty laboratory users group needs to be established to document and work out plans for the university and RF to address aging facilities and equipment.

Export Controls/Deemed Export Regulations

- **Recommendation:** SDSU needs to develop and implement university-wide policies and procedures for export controls. This needs to be addressed by both at the University and the RF.
- **Recommendation:** At SDSU the RF and the University Division of Research Affairs should work together in setting clear priorities that address the role of each in managing and overseeing export control policies, processes and procedures.

BACKGROUND, CHARGE, AND APPROACH

The National Council of University Research Administrators (NCURA) Peer Review Team would like to commend the San Diego State University for undertaking an open and comprehensive review of the research administration infrastructure. The strong support for research is evident with the decision of University leadership and the University community to engage in a process that allows all members to participate and contribute.

The NCURA Review Team especially believes it is a critical part of this review process to include experienced research administrators who have a national presence. This external validation allows San Diego State University to incorporate best practices and models into their final action plans.

An evaluation of the research administration areas within the Research Foundation, and San Diego State University was conducted at the request of Thomas Scott, Vice President for Research. The NCURA Peer Reviewers consisted of (4) individuals who all brought experience with sponsored programs operations (see Appendix B for bios of the peer reviewers). All reviewers possess national-level experience on pre-award, post-award, departmental, and compliance operations, as well as a broad view of the academic environment and the interface of academic needs with research administration processes.

The Charge and Scope of Work given to the reviewers appears in Appendix C. Prior to the three-day site visit (itinerary appears in Appendix D) the Peer Reviewers received descriptive materials from the University covering policies, forms, and other information. The evaluation was performed in April, 2011 (site visit on April 24-26, 2011).

The evaluation covered the Institutional Infrastructure and Core Operations of the National Standards for research administration. The review assessed the following broad areas:

- 1) **Institutional Infrastructure**, consisting of Organizational Structure; Communication, Outreach, and Education; Compliance and Risk Assessment; and Electronic Research Administration
- 2) **Core Operations**, consisting of Proposal Services; Award Acceptance and Initiation; Award Management; and Research Ethics

Acronyms Used:

- AAUS: American Academy of Underwater Sciences
- ARRA: American Recovery and Reinvestment Act
- COI: Conflict of Interest
- CSU: California State University
- DRA: Division of Research Affairs, Graduate and Research Affairs

- F&A: Facilities & Administrative Costs or Indirect Costs or Overhead Costs
- FIPS: Faculty Interest Profile System
- FFATA: Federal Funding Accountability & Transparency Act
- GRA: SDSU Graduate and Research Affairs
- HIPAA: Health Insurance Portability and Accountability Act
- IACUC: Institutional Animal Care and Use Committee
- IBC: Institutional Biosafety Committee
- IRB: Institutional Review Board
- ITAR: International Traffic in Arms Regulations
- MIS: Management Information System
- NCURA: National Council of University Research Administrators
- NIH: National Institutes of Health
- NSDD: National Security Decision Directive
- OLAC: Office of Laboratory Care
- PAG: Project Administration Guide
- PI: Principal Investigator
- RCR: Responsible Conduct of Research
- RSF: Research Support Funds
- SDSU: San Diego State University
- SDSURF: San Diego State University Research Foundation
- SPIN: Sponsored Programs Information Network
- SRA: Sponsored Research Administration
- SRCC: Sponsored Research Contract & Compliance
- SOP: Standard Operating Procedures
- SRD: Sponsored Research Development

- SRS: Sponsored Research Services
- SOP: Standard Operation Procedure
- TTO: Technology Transfer Office
- URC: University Research Council

NATIONAL STANDARDS FOR SPONSORED PROJECTS OPERATIONS

The NCURA Peer Reviewers utilized the National Standards for Sponsored Project Operations, developed by NCURA, as guidelines to conduct this assessment. The Standards appear as Appendix A. The application of those Standards to San Diego State University is described in the following sections of the report.

NCURA Standards for Institutional Infrastructure

The NCURA Standards for the Institutional Infrastructure are based on two key points. (1) The structure for sponsored programs should support all the needs of those activities at both central and departmental levels. Communications and coordination must be clear, and the lines of authority should be specified for each function. (2) Institutional resources, including staff, should be sufficient to support the core functions of sponsored programs in a manner consistent with the institutional mission.

NCURA Standards for Core Operations

Proposal Services: The NCURA Standards for Proposal Services focus on support of faculty and staff in the general areas of providing funding information, assistance in proposal development, review of proposals prior to submission, and monitoring sponsors for changes in process and policy. These Standards outline the importance of a thorough understanding of federal and non-federal policies, as well as the importance of disseminating a wide variety of information to differing audiences, routinely, clearly and with relevance.

Award Acceptance and Initiation: The NCURA Standards for Award Acceptance and Initiation focus on the areas of reviewing and negotiating award terms and conditions, subawards, formal acceptance of awards, and award activation and notification to appropriate parties.

Award Management: The NCURA Standards for Award Management focus on the areas of fiscal and administrative management. These Standards outline the importance of a thorough understanding of federal and non-federal policies, appropriate accounting mechanisms and internal controls and covers areas such as F& A rates, cost sharing, re-budgeting, time and effort, fiscal controls, cost accounting standards, cost transfers, cash management, program income, recharge centers, procurement, closeout, prior approval, reporting, record retention, data retention, subrecipient monitoring, intellectual property, and property control.

Research Ethics: The NCURA Standards for Research Ethics cover institutional systems for meeting federal and state regulations for the oversight and protection of certain populations involved in research, most notably the use and protection of humans and animals in research.

These Standards also cover expectations for institutional systems for the oversight and protections involved in the use of radioactive materials, bioterrorism, conflicts of interest, and export controls. The Standards define expectations for linkages between the management of sponsored programs and the assurance of project integrity. Although not explicitly stated, the Standards suggest a broader expectation for an institutional statement or program on responsible conduct of research.

CURRENT ENVIRONMENT FOR SPONSORED PROGRAMS OPERATIONS

Any institution that is focused on developing a more research-intensive program faces a number of challenges. On one front is the challenge to change the culture of the institution to integrate a heightened focus on research. On the other front is the challenge to build an infrastructure that can nurture, facilitate, and support a growing research enterprise.

A growing research enterprise brings a measure of risk, accountability, and oversight to the institution that has not been previously apparent. Those measures are in response to a parallel growth in attention by the federal government that is evidenced by escalating policies, regulations, and oversight. This increased involvement of the federal government in research oversight has resulted in the need for higher degrees of specialization and education on the part of institutional sponsored programs staff. Institutions now maintain a delicate balancing act between developing the infrastructure for facilitating and moving forward research activities of their faculty and providing sufficient oversight and internal controls to demonstrate accountability and to mitigate risk.

In the last five years, institutions have been especially impacted by the external environment. Reduced funding, increasingly large-scale and multi-disciplinary research, and collaborations with foreign scientists and business have all contributed to complex relationships and issues of ownership. The recent federal attention on institutional operations through audits, whistleblowers, and investigations has not only exposed our institutions to the public but has brought increasing levels of Congressional attention. The resulting attention on how institutions manage their relationships and the use of the public's funds often results in tighter institutional controls and more restrictive policies imposed on both the university and faculty.

Many of our institutions are now recognizing that the growth of infrastructure and specialized expertise has not kept pace with the complexity of the current-day research relationships and the attention to government regulations and policies that are inextricably intertwined with the external funding.

Institutions that are transitioning into a greater focus on research will find that external funding is a double-edged sword. At even a relatively low level of funding, the federal awards carry all the rules, regulations, oversight, and accountability found at the top universities whose research enterprise is in excess of \$1 billion dollars. It is critical that an institution have adequate staff, with appropriate training and resources, in place to handle the administrative burden imposed by accepting external funding. Mistakes in this area can be damaging to both individual and institutional reputations. In addition, sponsored programs offices are responding to deadlines not of their own making. Decisions and administrative actions must often be

undertaken with virtually no advanced notice. Sponsored programs offices, pre- and post-award, must have staff in the office every day. Shutting down these offices for even short periods of time due to inadequate staffing can have both short- and long-term consequences for the institution's research enterprise.

The infrastructure supporting sponsored programs is always complex and it requires a periodic review to determine if it efficiently supports the efforts of investigators while also offering an adequate compliance posture with the regulations that underlie federal funding. There are trends in the approach to supporting faculty and to the direction an institution may establish in order to demonstrate its stewardship of sponsor funds.

This general discussion of the current national environment within which all sponsored programs operations exist and the special challenges for transitioning institutions will serve as a foundation for the more specific discussion of the pre- and post-award functions, project integrity, and institutional infrastructure issues for sponsored programs staffing, communication, and educational programs.

INSTITUTIONAL INFRASTRUCTURE

Many integral aspects of an institution's infrastructure provide the framework for supporting the extramural funding of faculty and provide the necessary protections and accountability associated with that funding. The institution needs to attend to the organizational structure of sponsored programs and the lines of authority and responsibility that support research. Within the organizational structure, the institution must provide attention to appropriate levels of staffing, necessary expertise of those staff, and salary and promotional lines for staff.

Institutions must ensure that faculty and staff understand the requirements and expectations of the funding sponsors with whom they work, as well as key institutional policies and procedures and risk areas. Institutions must ensure that faculty and departmental/college staff have ready access to the body of knowledge needed to effectively oversee their sponsored projects. Key roles and responsibilities for those involved in the research enterprise need to be articulated to all participants and accepted, understood, and promoted (enforced). The institution must establish mechanisms to communicate key regulatory, policy or procedural changes to stakeholders, recognizing the varied roles of the participants. Appendix E provides examples of some NCURA resources that are utilized by institutions in their educational and professional development activities.

Organizational Structure

NCURA Standard II.A.i. Operational Structure

San Diego State University is part of the 23-campus California State University system. Within the CSU system, SDSU is generating the largest amount of sponsored research funding of the CSU institutions. Because the CSU system is not supported by the State budget to advance research, SDSU utilizes the SDSU Research Foundation to provide the full range of research administration services, supported in part through F&A recovery on external funding.

The Research Foundation is an auxiliary organization (501(c)(3)). As a nonprofit corporation, the Foundation is governed by a Board of Directors in accordance with its articles of incorporation and bylaws.

The Research Foundation contains the primary operational and business functions associated with sponsored programs, as well as other related functions that support the research enterprise. These areas include:

- Core sponsored program functions: Sponsored Research Development (pre-award), Contracting & Compliance (contracting and quality control), Sponsored Research Administration (post-award).
- Systems and Support (effort reporting, 6 FTE “technicians” who provide basic support across core sponsored program functions and help move paper across SDSU and Foundation).
- Communications
- Research Advancement (federal relations and technology transfer and commercialization).
- Finance & Operations (computing services, finance & accounting, systems, investments).
- Facilities Planning & Management
- Human Resources & Risk Management

The Foundation Board includes the President, Provost, Vice Presidents for Research and Business Affairs, six faculty, four non-University members, and the Student President. The Board agenda is set by the Foundation management team. Recent efforts have extended an invitation to the Board members for agenda topics. Board agendas are a mix of education to the members and administrative functions such as budget approvals or approving property transactions.

Research at SDSU has grown significantly. Over the course of managing research within a structure that has separated out the research business functions, the integration and the cohesiveness of the many infrastructure management functions has become fractured. A number of indicators point to the fractures:

- For the last few years the President has been trying to move strategic decision-making and directions for research to more clearly reside within the University. The philosophical shift, while likely not apparent to the academic community, has created some frustration as faculty have found past patterns of business with the Foundation being changed.
- The Foundation Board has undergone some recent changes. The President has moved to transition the Board from a previous entrepreneurial focus to one more clearly focused on serving SDSU sponsored program needs.

- While more PIs have recently been added to the Board membership, agendas have been traditionally set by the Foundation and contained primarily administrative and informational reports. While not an atypical approach for engaging Foundation or other Boards, many of the SDSU PIs have felt their needs were not being met by an organization that was intended to support their research needs.
- There is confusion among faculty and Foundation staff as to who holds what roles and responsibilities. As a result, there was much misinformation as to where responsibilities are vested and who makes decisions in many parts of the research enterprise.

It is apparent to the Review Team that the many stakeholders at SDSU did not have a clear sense of who is driving the research agenda for the University. Because SDSU has made a commitment to continue to grow its significant research portfolio, it is important to clearly vest the research vision and direction in the Vice President for Research.

- **Recommendation: The President and the Vice President for Research need to carefully assess the roles and functions that currently reside in the Foundation and determine which of these should be moved to the University in order to be closely vested with the Vice President for Research, as the individual who is responsible for articulating and moving forward the research priorities for the University. How recommendations move from the University committees to the Foundation should be clearly defined and transparent to all stakeholders.** Some activities that may be specifically considered would include the communications and the advancement functions that currently reside in the Foundation. The annual process of setting the federal agenda and priorities for the University should clearly be driven by the VPR and the Deans, with engagement of faculty and center and institute directors. The Foundation Advancement is a critical partner in this initiative, but the appearance is that they are defining the agenda and leading the process. The Office of Communication is another area that should be critically reviewed. Communications internal and external to SDSU will take on increasing importance as research continues to grow. A communications staff to assist the VPR in these communications and in framing the SDSU message is important.
- **Recommendation: In clarifying the role of research, the Vice President for Research should engage the academic deans, center and institute directors, and faculty in defining a written strategic plan for research.** The engagement of the academic community to define the vision and goals for research is a critical next step in creating a shared vision that will help to identify priorities for the University.
- **Recommendation: As the University clarifies where the role and driver for research resides, the President and the Vice President for Research need to define how expectations and directions are conveyed to the Foundation. During this process, the presence of Foundation staff on University decision-making committees should be carefully assessed as to need and purpose.** Because there appears to be widespread confusion over the role of the VPR and the role of the Foundation in leading the research enterprise, the University may find it

advantageous to more clearly separate Foundation participation in some University driven processes and identify other appropriate mechanisms for communication.

Accompanying a research strategic plan for SDSU should be a strategic plan for the communication of the research and scholarship that is underway. The VPR, as the senior research administrator, should carry the responsibility for defining how the research story is extended. The University Marketing and Communication office provides news stories currently on SDSU research, but does not have a specific plan other than creating news stories. Many research universities utilize the VPR, Advancement, and Marketing and Communication to create the brand and define the strategies that will best promote research to the community, federal and state officials, and the nation.

- **Recommendation: To clarify the responsibility for promoting research, the VPR and the SDSU Marketing and Communication Office should develop a strategic marketing plan that will brand and extend the SDSU research story.**

The organizational structure for sponsored program operations that exists at SDSU and the Foundation is a model that is found at other universities with a research foundation. The complicating factor is that the Foundation serves functions typically found in central sponsored program offices as well as those found in department or college support offices. At research universities the size of SDSU, the department or college-level support to the PIs is a critical aspect to relieve PI burden in the day-to-day maintenance of their sponsored awards.

Operationally, there is much confusion over what administrative support is provided to the PIs from SDSURF sponsored programs staff. There appears to be a high level of unevenness of service. A number of PIs reported that are utilizing their portion of the RSF to hire administrative staff to provide assistance in managing sponsored programs, effectively eliminating use of these funds by the PI to grow and nurture their research programs.

- **Recommendation: The Foundation should provide a detailed list of specific functions and responsibilities offered in each of the sponsored programs offices and make this listing available to all PIs.** Such a list helps to clarify for both PIs and staff the specific responsibilities and functions that are offered. As part of developing such a list, faculty should be engaged to help identify gaps or missing activities. The process should provide full understanding to faculty in terms of what is reasonable, and not, in terms of services that are typically extended.

The Foundation has two satellite operations for post-award at Sky Park and Alvarado. A third satellite operation was eliminated due to that space being needed by the College. Discussion with staff and faculty indicated that the satellite operations appeared to be fairly well received with a closer sense of partnership and access to services. The satellite operations are a model that more closely emulates the more traditional departmental-level support found at many universities and the emerging model of business service centers for colleges or clusters of areas.

- **Recommendation: The existing model of satellite operations for sponsored program services should be closely examined to determine if extending the**

model will enhance access and partnership between PIs and sponsored programs staff.

Within the office of the Vice President for Research and Graduate Dean on the SDSU campus is the Division of Research Affairs. The DRA contains functions of human and animal oversight, conflict of interest, and biosafety. The Division Director oversees these regulatory compliance areas, as well as several research promotion areas. By authority of the Vice President for Research, the Director may sign for the University on sponsored program proposals. The Director reported that the practice is for her to review and sign sponsored program proposals.

The College of Science has a half-time Diving Safety Officer who works with a Diving Control Board. SDSU belongs to AAUS. While the diving program is located within a College and supported through that unit, the program will certify any SDSU diver who has received certification and met requirements for scientific diving. The College of Science additionally has the Office of Laboratory Animal Care manager. The OLAC manager sits on the animal care and use committee.

- **Recommendation: SDSU should consider establishing the diving safety program as a University-level function and place the activity under the Division of Research Affairs.** The program is currently acting on behalf of the University, but has limited their existing training to only the College of Science. The limited focus to a single College may result in diving activities occurring at SDSU that are not receiving appropriate oversight.
- **Recommendation: As animal research continues to grow, SDSU should anticipate centralizing the animal care facility under the Vice President for Research.** While the current animal use research is primarily found within the College of Science, as animal use grows and extends to faculty from other colleges, a more centralized approach to animal oversight might be an important model and direction. Expanding programs often face questions of equitable access, facility and animal charges, and space considerations and at some point a centrally managed facility will help to address those questions.

NCURA Standard II.A.ii. Staffing and Resources

The Foundation staffing in the core sponsored program areas covered in this report includes:

- **Sponsored Research Services:** 1 Associate Executive Director, 1 Administrative Analyst
- **Sponsored Research Development (pre-award):** 1 Director, 1 Coordinator, 8 Development Specialists
- **Sponsored Research Contracting & Compliance:** 2 Co-Directors, 5 Analysts
- **Sponsored Research Administration (post-award):** 1 Director, 5 Coordinators, 28 Administrators, 2 Technicians

- Gateway: 3 Coordinators, each overseeing one group of 6 Administrators, , or 5 Administrators. 4 Senior Administrators.
- Sky Park: 1 Coordinator overseeing 4 Administrators and 1 Technician
- Alvarado: 1 Coordinator overseeing 4 Administrators and 1 Technician
- **Systems and Support:** Systems Coordinator, Effort Reporting Analyst, Receptionist, and 6 FTE Technicians that provide support across areas.
- **Communications:** 1 Director, 1 Coordinator, 1 Administrative Assistant

The staffing across these areas receives a combination of in-house training and external training.

- **SRD:** training initiatives are just now beginning to use the NCURA 2.5 day workshop training as a model of training to supplement the in-house training. Generally the training process tries to provide new staff with three to six months for training and shadowing before the new staff completely assume their responsibilities.
- **SRCC:** training of staff has been more one-on-one training. Some staff have been sent to NCURA 2.5 day workshop training on sponsored programs.
- **SRA:** training consists of a detailed in-house training program supplemented by use of the NCURA 2.5 day workshop training on sponsored programs, webinars other professional development offerings. The in-house training uses a 3-month period to assess the new staff member to determine if they are ready for signature authority. It was reported to the Review Team that generally between 3-6 months all new staff completely assume their responsibilities, although subsequent information provided to the Reviewers indicated full workload was reached at 12 months.
- **SRD, SRCC, SRA:** all areas provide ongoing professional development opportunities both internal and external to the Foundation.
- **Communications:** the Grants Resource Center has recently been used for initial training of a new staff member. Professional development has utilized a series of GRC webinars.

While the majority of training of new staff consisted of in-house training programs on specific functions, as is often found in sponsored program operations, it was not apparent that there was a deliberate focus on training for new staff in the critical aspects of communicating with faculty, problem-solving, or general areas of customer service. Information provided to the Review Team after the site visit indicated that the training does include communication with faculty (role playing verbal communication and drafting email messages to PIs). It is understandable, given the large number of new staff hires and the need to stabilize the operation while new staff gain experience, that attention to basic communication and customer service skill

training may not have received the attention that it needs or that additional focus needs to be added on an ongoing basis for the staff.

- **Recommendation: SRS should utilize a communications consultant to provide overall training to all staff in communication and customer service skills.** The large number of new staff hires, and the general confusion and frustration expressed by faculty about service, points to the need to take immediate and broad action across the sponsored program operation. While in-house communication and customer service training could be developed and offered, it will be important to visibly demonstrate to the faculty that their concerns are being addressed. Engaging the URC and the Foundation Board in the process of hiring a communications consultant to provide that overall training to staff will visibly begin to address the need for staff training and concerns of the faculty.

In reviewing the Foundation staffing in the sponsored program areas, in almost all areas there was a very high level of staff departures. This has led to a number of new hires and the need for extensive training for staff to be able to perform basic operations. As a result, it is apparent that faculty have experienced uneven service across the enterprise, often as a result of new staff essentially learning on-the-job.

It is commonly understood in research administration that it generally takes 12 to 18 months to adequately train a new research administrator in the performance of their responsibilities. With ever increasing complexity of sponsor, federal and State policies, regulatory changes, and multiple systems that need to be learned and navigated for successful proposal and award management, the expertise of the sponsored programs staff becomes one of the more critical operational components. With new staff being moved into their responsibilities within three to six months, many aspects of their training necessarily is not yet in place before they are expected to assist faculty.

- **Recommendation: The Foundation needs to critically analyze the underlying reasons for the high level of staff departures and identify mechanisms for improving staff retention.** Areas that should be critically assessed include comparable pay scales across SDSU and within the region, working environment, and reasons for staff departures (going back for the last two years to conduct exit interviews, where possible). Human Resources might be a resource to assist SRS in the analysis.

Throughout the sponsored program functions, there were extensive and detailed checklists and forms for the staff to use to carry out their responsibilities. The detailed checklists were often accompanied by a number of reviews of the staff work, conducted by supervisors at sometimes two different levels. This has resulted in excessive redundancies in work processes. The checklists and multiple reviews might be a direct result of the turnover and need for training and review of work of the new staff. If this is the case, then as the new staff gain in expertise the use of checklists and review of staff work should diminish. If staff inexperience is not the reason for the detailed checklists and multiple reviews, then process redundancies need to be critically reviewed and staff authorities and responsibilities more clearly defined and assessed.

- **Recommendation: The Sponsored Programs Services should critically assess the role of the checklists and multiple reviews as relates to the training process of staff. Appropriate authorities should be assigned to staff as experience and performance goals are met.**

The Reviewers heard a significant amount of concern from faculty about the sponsored programs support. A primary theme of unevenness in services in all areas was expressed as well as a number of examples and issues related to service. The depth of the faculty concerns suggest the partnership between sponsored programs support and faculty is fractured and it is important to immediately begin to address that relationship. As an initial step, it is important to more clearly identify the types or range of issues that are the basis of the faculty concerns and to determine how the organization can address these issues (if operational) or how the faculty can become better educated (if there are misconceptions about the committed level of service).

- **Recommendation: The Foundation should immediately implement a central “hotline” for faculty to utilize if sponsored program-related issues are not addressed by normal processes. Such a hotline should be staffed by several full-time experienced research administrators who can respond knowledgeably to issues as they are brought forward. A faculty committee should participate in analyzing data and collaborate with the Foundation in identifying operational improvements and faculty educational programs that are a result of the analysis.** Implementing such a hotline would provide several results:

- Response to specific faculty issues with factual and accurate information
- Acknowledgement of the degree of faculty disillusionment that needs are not heard
- Identification of problem areas
- Track issues and identify patterns with feedback to operational improvement

Within the Division of Research Affairs, specific staffing recommendations for the regulatory compliance areas will be covered under the Research Ethics portion of this report.

The SDSU research enterprise continues to grow and evolve. With this growth there needs to be consideration of several aspects of infrastructure support within the DRA.

1. An additional senior-level administrator to help manage and direct the multiple aspects of research planning would appear warranted. Many research universities of the research volume of SDSU would have an Assistant or Associate Vice President for Research to assist in providing leadership for communications, outreach, and building research partnerships.
2. Dedicated IT support for regulatory compliance operations is needed. As electronic research administration is implemented across the regulatory compliance areas, and maintenance of systems as well as integration of regulatory compliance with

sponsored programs occurs, increasing levels of dedicated IT support for the research operations becomes critical.

- **Recommendation: The Vice President for Research should review peer and aspirational peer institutional organizational structures for potential staffing models for senior positions such as an Assistant or Associate Vice President for Research.** A review of aspirational peers will especially provide a roadmap for staffing models that recognize the increased complexity and relationships that come with research growth.
- **Recommendation: In considering the future growth of research and the continued evolution of research administration tools and systems, the VPR should consider the value of a full time dedicated IT position to provide research support.** Given the increasing dependence on electronic tools and systems as well as data reports of academic units, a dedicated position would be able to work across the sponsored programs spectrum of needs with an eye towards integrating systems and assisting with visioning electronic tools to streamline operations.

NCURA Standard II.B.i. Communication and Outreach

The SDSURF Office of Communications distributes information regarding policies, procedures and important news to PIs, project directors and project staff. Special efforts are made to reach new faculty or those new to SDSURF through email communications, one-on-one meetings and workshops. Communications staff contact each new faculty member in their first semester at SDSU to encourage registration in the faculty profile system, provide an introduction to the SDSURF organization and its services, and learn of the faculty member's research interests. Approximately 50% of the new faculty register for the Faculty Interest Profile System (FIPS), and 80% of new faculty either register for FIPS, attend a workshop, or meet with office staff during their first year. Staff typically are allotted 20 minutes at the University's new faculty orientation meetings. If several new faculty are in one college, communications staff will host a meeting with all of them and the dean's office to provide an orientation to RF services. New faculty are also invited to SDSURF workshops.

The SDSURF executive director and management staff host brown-bag luncheons each semester to discuss policy and procedure changes or issues from the audience. A newsletter, Focus on Funding, is distributed electronically nine times a year to a variety of readers, including faculty and staff who are registered in the Faculty Interest Profile System.

The SDSURF website includes an electronic copy of the Focus on Funding newsletter, as well as information related to finding funding, managing funds, the RF organization, and the available electronic systems to locate funding, upload files, and manage award funding.

Reviewers heard from faculty that it is difficult to determine the policy basis for decisions being applied to their research awards. On the SDSURF website, under SRA Resources, is a listing entitled "SDSURF Policies/Guidelines" with links to the Campanile Foundation, the CSU Chancellor's site, CSU, SDSU Research and Graduate Affairs, Technology Transfer and the Project Administration Guide. These policies are not immediately apparent on the SDSURF

home page and some of them do not link to policy documents. Indeed, the forward of the Project Administration Guide explains that the PAG “broadly covers those policies and procedures that most directly affect you (project directors, PIs and staff) and is meant to be used as a general information source only.” Thus, there is no public link to original policy documents of SDSURF.

- **Recommendation: Individual policies of SDSURF should be assembled and posted prominently on the SDSURF home page.** Established procedures and/or guidance may also be included provided they are not identified as policy. In addition, links should be established to the individual research policies from Research and Graduate Affairs to reflect a full collection of research policy. Several universities have published their policies in this manner, including the University of California, Irvine - <http://www.research.uci.edu/researchpolicies.htm> and University of Texas at San Antonio - <http://vpr.utsa.edu/osp/guidelines.php>. A review of comparison universities should provide additional examples.

The Division of Research Affairs issues its own e-newsletter entitled “The Compass” approximately twice a year. It appears to be aimed at faculty and students, and includes brief information on regulatory compliance areas, such as responsible conduct of research, human and animal subjects, conflict of interest, biosafety, intellectual property, and student issues. Reviewers could not determine if these compliance areas provide any other regular communications to faculty, staff, students or senior management regarding policy updates, current national or local issues and process improvements. Federal regulations mandate the institution provide on-going education as part of the IRB and IACUC programs, and regular newsletters are one way to accomplish this goal.

- **Recommendation: The DRA and the SDSURF Office of Communications should immediately initiate a communication program for the regulatory compliance areas.** News articles should address relevant issues and might include educational case studies to highlight risk areas that may exist in SDSU research. Content should be written by the regulatory committees and staff, keeping in mind the need to be concise. The communication plan should consider whether to combine information on the regulatory areas or target information to PIs who use a specific regulatory committee, and whether to communicate via a simple email or newsletter format. The plan should also determine where this information is to be archived on the web and the links needed to ensure easy access. With satellite operations, such as Imperial Valley, Sky Park and Alvarado, there should be more thought put into developing regular communications at all levels in order to ensure consistency. An example of a human research newsletter can be found at <http://www.research.uci.edu/ora/hrpp/HRPPnewsbrief.htm>.

The SDSURF executive director meets with the SDSU President, Provost, Vice President for Business and Financial Affairs and the Vice President for Research on a regular basis to discuss current issues within the RF. These senior managers also receive the same policy and sponsor information distributed to the PIs. Deans, directors and chairs receive the same e-mail notifications and often are contacted by SDSURF managers or the executive director regarding sponsor or project matters. The VPR is connected on a regular basis to Deans by sitting on the

Deans Council, and through individual meetings with Deans. However, the Deans Council is led by Deans and focused on academic issues. There does not appear to be a VPR-led forum for a more specific focused discussion about research issues and the research agenda. Such a venue would raise the visibility and role of research as well as identify the senior research administrator who is leading the research process.

- **Recommendation: The VPR should begin to engage, as a group, the deans and the directors of research centers and institutes in discussions of research issues on a regular basis.** These meetings would be a focused engagement of the group with research as the agenda, rather than reporting on the state of the enterprise. Quarterly or monthly meetings would allow this group to maintain momentum and provide the VPR with a ready source of informed feedback. As a second step, the VPR and deans and directors could host college-based forums on research issues and updates, which would help to engage academic partners and put the University (not SDSURF) at the forefront of visibility.

The Review Team heard repeatedly from the faculty concerning their frustrations. A pronounced theme arising from discussions with over 80 faculty members is that they do not have an avenue for voicing their concerns or identifying areas that are creating impediments.

- Many faculty indicate that they are unfamiliar with the charge to the University Research Council, a faculty senate committee. Surprisingly, several individuals who have participated on the Council say that they did not feel they represented other faculty or accomplished anything to improve research at SDSU.
- Approximately three years ago, SDSURF had a PI advisory group that provided useful feedback, but the group was disbanded because it was ineffective and too narrowly focused on the five or six faculty participants.
- Another area of concern voiced by the faculty was the distribution of Research Support Funds, which are based on the amount of full F&A costs generated in the previous year.
- **Recommendation: A simple web-based process should be established for faculty to provide suggestions or feedback on service and staff performance for all units within SDSURF and DRA. Links should be included in correspondence to PIs related to proposals, awards, compliance committees and financial reports. Links should also be prominent on the SDSURF and DRA websites. Managers should review and respond to the comments in a timely fashion and compile a record of each comment for further analysis. Patterns related to staff performance problems should be addressed through the performance review mechanism or appropriate human resources procedures. Continuing processing problems should be discussed with the appropriate managers and staff to identify a solution. Positive comments should be promptly shared with the responsible staff member. In all cases, a response should be provided to the individual who submitted the feedback, if that is possible.**

- **Recommendation: The Vice President for Research and the Deans of the academic colleges should hold open forums for faculty in their colleges to enable discussion of sponsored program issues.** The series of open forums will provide a level of transparency to the faculty as well as a conduit for discussing shared concerns. Such a setting provides opportunities for the Dean and the Vice President for Research to discuss actions that are taking place that will assist in meeting those concerns and put the University at the forefront of visibility in terms of leading the research mission. The University Research Council (URC) might be considered as part of the open forums.

The URC is a Council of the faculty senate; a charter for this Council exists on the senate website. In discussions during the site visit, it became apparent that the role of the URC was not clear to the majority of stakeholders. Many faculty were only vaguely aware of the URC. The members of the URC were not entirely clear of their role as a member of the URC (but were very actively engaged and participatory in this review process). The Vice President for Research serves as chair of the URC. Within the last 12-18 months, this committee moved to meet more frequently than twice a year.

In more visibly placing the decision-making for research in the University, it is critical that the role of the URC and the conduit for faculty input be defined and implemented immediately. Research universities have many faculty advisory and policy committees that all are formed to enable faculty to provide input into the research process and decision-making. While SDSU has established the regulatory compliance faculty committees, those committees should be focused solely on the scope of the specific regulatory area, and do not replace the policy and advisory committees concerned with broader issues.

- **Recommendation: A faculty research policy and/or advisory committee should immediately be defined (or more clearly defined for the existing URC), serve under a faculty Chair, and meet monthly with the Vice President for Research with a focus to discuss research policy and other research-related issues that impact the research enterprise.** The role of the URC should be strengthened and include the formation of subcommittees to look at various issues such as F&A recovery, electronic routing of proposals for internal signatures, and strategic planning for research. More than one faculty Council, each with different purposes, may be needed. With the turnover of a number of senior administrators, it is an opportune time to involve faculty in research strategic planning.

Although staff indicate that they work closely with faculty on all aspects of a project, the Reviewers heard from several faculty that the SRS staff do not understand their projects, how they do research, or appreciate the associated challenges. Several groups referred to inconsistent treatment of PIs under current policies for the return of research support funds, space assignment, bridge-funding, level of service, and cost sharing commitments. One person stated that those who complain the most receive better service. The inconsistencies may be due in part to staff turnover, but different treatments may be justified and the perception exacerbated by a lack of transparency in SDSURF actions. The lack of empathy leads some faculty to identify the staff as bureaucrats and obstructionists. In order to improve this relationship, SRS staff need to become more proactively engaged in the faculty research climate and culture. Along with improved

performance, increasing outreach and information flow to faculty should improve the perception of customer service.

- **Recommendation: SDSURF and DRA supervisors should educate staff on the faculty perspective of research administration, emphasize prompt communications with faculty, and provide practical training on customer service.** Consistent treatment should be the goal with a clear explanation for deviations from the norm. Performance evaluations should regularly include an assessment of communications with faculty and customer service. SRS staff should meet the faculty that they serve by attending faculty orientation sessions, departmental meetings or in one-on-one meetings in the faculty's offices.

The Department of Marketing and Communications is part of SDSU's University Relations and Development. M&C promotes SDSU teaching, research and community service through a variety of news media reaching SDSU alumni, the campus community, and the general public. Hard-copy and electronic formats, including a blog, are utilized to achieve the broadest readership. SDSURF Office of Communications provides a monthly awards report to M&C in order to bring projects to the attention of the writers.

- **Recommendation: The VPR should work with the Department of Marketing and Communications to develop a communications strategy for extending the visibility of SDSU research.** Such a communications strategy would address how and who directs information to Marketing and Communications, regional and national exposure, and branding. The role of SDSURF Advancement and SDSU Marketing and Communications needs to be explored so expertise from both areas can be meshed and focused into the strategic goals for SDSU.

SRD provides copies of monthly reports on proposals and awards to the Associate Executive Directors and the SDSURF Executive Director. A quarterly summary of proposals and awards is provided to the Deans by the Office of Communications. Also, a report on proposal and award activity is published annually and widely distributed. The Board receives reports of proposal and award activity at its March and September meetings. No report is regularly sent to the University Research Council, although they may be obtained upon request. The communications office sends quarterly email messages to the VPR with a link to all awards/proposals for that quarter and prior, and other reports upon request. Earlier in this report, the recommendation was made to enlist the services of a communications consultant. This individual should also assist in developing a program to identify constituents to receive reports on proposal and award activity, as well as suggest the frequency and method of distribution.

- **Recommendation: The VPR and the URC should engage primary stakeholders in discussions concerning research activity report needs. A communications consultant should serve as a resource to assist in an overall internal communications plan.**

NCURA Standard II.B.ii. Education

A committee comprising staff from communications, SRS, and other units meets each semester to approve a list of workshops and conduct them throughout the year. Workshops include standard sponsored research topics, plus purchasing, the federal budget, accounts payable basics, immigration tax issues, and export control. In fiscal year 2009-2010, SDSURF staff presented 28 workshops and webinars to almost 300 faculty, students, and staff from SDSU and SDSURF. During the first nine months of fiscal 2010-2011, 30 workshops and webinars were conducted. Faculty and students understandably made up the lowest percentage of total attendees.

- **Notable Practice: The "Professors helping Professors" (PhP) program was initiated by the President to assist junior and senior faculty in obtaining extramural funding.** Promising faculty are nominated by their deans and paired with successful senior PIs for a two-year period. This pairing provides mentorship and guidance to the junior faculty member in developing and submitting proposals for project funding. A monetary incentive is given to the senior member for each proposal submitted, plus an additional incentive if the proposal is funded. This unique program is very well regarded by SDSU faculty and SDSURF staff.

A web-based IRB tutorial focuses on ethical principles and practices when conducting research involving human participants and basic issues relevant to protection of participant rights and welfare. Access is made through a password-protected link on the DRA website. All PIs who submit to the IRB and all key research personnel associated with NIH-funded research must complete this training prior to performing research with human participants. The DRA website states that staff offers ongoing training for the SDSU research community. However, no current training schedule is posted and information from past training was not included in the self-study materials provided to the reviewers. Subsequently, the reviewers were told that a training program of approximately 20 workshops annually reaches about 600 faculty and students, although the attendees are primarily students. Given the federal requirements for on-going education of researchers and IRB committee members, the IRB staff should be conducting regular workshops or information sessions for all individuals engaged in human research.

- **Recommendation: IRB staff should expand the face-to-face training program to reach all personnel (faculty, staff and students) who perform human subject research in order to augment the existing web-based tutorial.** Courses should be offered regularly and made available to faculty and staff, in addition to students. Attendance at these sessions should be tracked for each individual as with the completion of the tutorial.
- **Notable Practice: The NIH-funded Training in Research Ethics and Standards (TRES) is culturally tailored, content-appropriate, Spanish-translated research ethics curriculum that targets Community Health Advisors/promotores (members of the research team who have direct involvement in research conducted within the Hispanic/Latino communities).** This curriculum emphasizes awareness of ethical, legal and social aspects of conducting research. Access is available on the DRA website. This is a noteworthy resource and the Reviewers

assume DRA tracks individuals who have accessed this program. If not, a tracking mechanism is advised.

IACUC training modules are available at a separate password-protected DRA website and must be completed by each individual before they can begin research. Animal welfare “refresher” training is required every three years during an ongoing project. A separate training module for field research is available and “refresher” training is also required every three years during an ongoing project. In addition, hands-on training provided by vivarium staff is required for all personnel who will be in direct contact with animals. The specific content and degree of detail for the hands-on training vary depending upon the knowledge, previous experience and expertise of the target audience.

Responsible Conduct of Research (RCR) training is provided through the Center on Materials and Devices for Information Technology Research (CMDITR) Responsible Conduct of Research (RCR) Interactive Tutorial. This tutorial option is offered to students and faculty, and it meets SDSU’s minimal standard for NSF-mandated RCR training and testing.

Environmental Health and Safety offers educational materials through the password-protected Blackboard system for those using biohazardous agents/materials or conducting experiments using recombinant DNA.

All CSU employees are required by state law to complete an online conflict of interest training course every two years. In addition, access to the NIH Financial Conflict of Interest Tutorial is provided on the DRA conflict of interest website. A workshop has been offered once a year as part of the SDSURF schedule.

- **Notable Practice: The DRA website offers an NIH-funded, web-based tutorial focusing on Basic Research Concepts.** This tutorial, funded by the Office of Research Integrity, provides orientation to those new to research (staff, students) in order that they may be able to understand research and carry out their duties/responsibilities in a manner that preserves the integrity of the research design. This is a noteworthy resource.

NCURA Standard II.C.i. Compliance and Risk Assessment

The RF has many policies and procedures in place for sponsored programs. The Review Team found that these policies and procedures are well formulated and meet current standards. There are many internal controls in place in the sponsored program financial area and these appear to be functioning well. SDSU has policies and procedures in place for the major compliance areas such as IRB, IACUC, Conflict of Interest, and IBC. While pre award and post award policies and procedures are well documented and posted in the RF web site and related documents, the Review Team found that the policies and procedures for the compliance areas in the Division of Research Affairs, for which the Vice President for Research is the Institutional Official, are not well documented and promulgated. The policies and procedures in the compliance areas have many key elements required by the regulations that govern their content; however, many are not up to date. While the policies and procedures of the IACUC appear up to date in many aspects, there do not appear to be standard operating procedures (SOPs) that are

well defined and accessible to the faculty. Major areas that should be included as SOPs, such as an Occupational Health Program, are still in the conception stage. The IBC policies do not address current DEA requirements. The IRB policies and procedures do not adequately cover continuous review of protocols.

The University is lacking an export control policy and export control procedures for major areas of the University, such as academic affairs, procurement, shipping and international affairs. Furthermore, the University does not have policies and procedures for handling data security issues and monitoring data security plans.

In addition, new requirements or risk areas are not being addressed within SDSU's policies. As an example, recent court rulings such as those found in *Stanford v Roche* have not been addressed in the Intellectual Property (IP) Policy of the university. The *Stanford v Roche* legal case concerns assignment of IP by faculty to the University and many universities across the country have revised their IP policies accordingly. The Reviewers were told by several faculty who are collaborating with the University of California at San Diego (UCSD) that they have assigned their IP rights to UCSD. They did so without consulting SDSURF or SDSU.

It is through the Director, Division of Research Affairs, that SDSU houses the operation and management of compliance committees. The Review Team observed that the IRB, IACUC, COI, and IBC operations and management are lacking up-to-date procedures. In addition, staff in these areas are not up-to-date on current trends or best practices. Also there does not appear to be a system for monitoring new sponsor requirements, external trends in audit and compliance, and risk areas at the national level.

- **Recommendation: SDSU should establish processes for: 1) the management of new compliance requirements, including dissemination of such requirements to faculty and staff and 2) the education and outreach requirements that may be associated with new or changing rules and regulations.**
- **Recommendation: New compliance procedures need to be addressed within institutional policies, education and outreach programs, and compliance reviews, as appropriate.** Participation in professional associations by staff members who work with committees is recommended.
- **Recommendation: Policies and procedures in the area of data security and data security plans need to be developed, implemented and disseminated to the faculty through the Division of Research Affairs.** Security plans that have been signed in conjunction with a sponsored project need to be identified and monitored for compliance with the plans.
- **Recommendation: The IP Policy of SDSU needs to be updated to reflect recent Court rulings.** Faculty need to be provided with guidance and training about assigning their IP to a third party without the permission of SDSU.

CORE OPERATIONS

Research administration begins with the receipt, review and submission of proposals to funding sponsors. Institutional offices and services need to be in place to aid faculty in the development of proposals into successful applications for funding. The NCURA Standards for Proposal Development and Assistance outline the need for staff that are knowledgeable in sponsor regulations and procedures and in the use of sponsor electronic systems for proposal submission.

Submission of successful applications hinges on a university's ability to keep up-to-date with sponsor policy and procedures, proposal solicitations, adherence to federal, state and local laws as they relate to compliance, and with the consistent application of university policy. These aspects of successful submission are realized only through a staff with regular access to changes in sponsor policy, electronic systems, and university policy.

In addition, institutional policies and sponsoring agency procedures have a significant impact on the conduct of research. Communications about these policies and any changes in them must be brought to the attention of senior management. The need for ongoing communications about compliance risks is critical to success in our dynamic research environment.

Proposal Services

Proposal Services in sponsored program operations includes collection and dissemination of funding information, proposal development and assistance, proposal review and submission, collaborative project development and providing faculty and other staff with information and interpretation on current sponsor policies, procedures and processes. These services should be within the scope of support provided by staff in school/departmental and centralized levels of research administration, with responsibilities shared as fit the institution. Proposal services are core to the undertaking of research and central to proposal success and awarding of extramural funding. Without efficient and reliable proposal services the research enterprise may falter or in some cases may fail.

Obtaining funding is critical and without funding the other elements of research administration would not exist. It is important to have strong support staff that are knowledgeable about proposal preparation, including allowable, allocable, and consistent costing. It is also important that pre-award research administrators can articulate to faculty and staff up-to-date information on sponsor policies, procedures and processes, are knowledgeable about electronic proposal submission, and can advise faculty and other staff on preparation of compliant proposals.

NCURA Standards 1.A.i Collection and Dissemination of Funding Information

The Office of Communications within the SDSURF provides funding information services to the faculty at SDSU. A number of information sources are utilized to identify funding opportunities and other program information, including:

- Numerous listservs and e-mail newsletters from sponsors

- *NIH Guide, NSF Update*, and other federal publications
- AASCU's Grants Resource Center which provides weekly bulletins and a monthly report of funding opportunities
- InfoEd SPIN database (searchable funding opportunities database)

Staff are knowledgeable about the different types of sponsors and how to obtain specific information.

A variety of mechanisms are used to distribute funding opportunities. These include:

- Direct e-mails to faculty on grant-related notices. Staff match a funding opportunity identified with faculty interests maintained in a database (FIPS). Faculty are asked to complete a profile form; 677 faculty profiles are maintained in the faculty interest database. During the last year over 3,000 emails were distributed to faculty on funding opportunities, resulting from staff identifying an opportunity, matching it through FIPS, and distributing an e-mail to appropriate faculty.
- Automated electronic matches of funding information sent through the SPIN system
- Funding searches when requested by a faculty member
- Monthly newsletter called Focus on Funding
- Grant deadline list posted on the website

The mechanisms used to disseminate funding opportunities are those that are used by universities. However, as a university reaches the level of research found at SDSU, many universities recognize that active research faculty are connected to funding sources and are aware of appropriate opportunities, typically in advance of when a central office becomes aware. The Review Team heard from a number of established faculty about the limited value of the funding distributions. This seems an excellent opportunity to assess the package of services offered to faculty and determine if the services are best meeting the range of needs of experienced and new faculty.

A large amount of effort is expended in monitoring listservs, maintaining a faculty profile system, and disseminating funding opportunities via e-mails (3,000 last year). The FIPS is a home grown faculty profile system that has a distribution list of faculty for each keyword; staff review a funding opportunity and assign a keyword.

This was an approach used by many universities in past years. However, most research universities have moved to subscription services for funding databases that allow faculty to register "profiles" and the system automatically matches and sends funding opportunities. The Foundation subscribes to SPIN, one of the several subscription services utilized, but it appears to not be the preferred mechanism for sending opportunities. Promotion of SPIN and utilization of

that specific subscription service might well serve the needs of faculty and provide efficiencies in the more labor-intensive process of mining for opportunities and matching through the FPIS.

- **Recommendation: The Office of Communications should assess the level of effort expended to match opportunities with their faculty profile system with the efficiencies gained by replacing that effort with the SPIN system.** The SPIN system contains about 600 SDSU faculty profiles, close to the same number of profiles maintained in the database of faculty interests. Redirected staff effort could be utilized for more focused attention on the needs of new faculty, who may need additional attention in identifying local or state funding to begin their funding track record.
- **Recommendation: The VPR, in collaboration with the University Research Council, should explore with faculty the value and impact of the current mechanisms used to disseminate funding information.** This assessment will assist the Communications staff in determining the most appropriate package of services that will reach and serve faculty.

NCURA Standards 1.A.ii Proposal Development and Assistance

The Development Specialists within the SRD provide support to faculty to develop compliant proposals. Faculty will contact the SRD when they are preparing a proposal. The staff provide a critical service in reviewing sponsor guidelines and assisting faculty to attend to the details contained in those guidelines. Although the Specialist provides the full range of support, many faculty are interested in only assistance with compiling a budget.

Proposal budgets are a collaborative process between the faculty member and the staff. Unfortunately, there are no master budget spreadsheet templates in place. As a result, each staff member creates their own budget spreadsheet. The Review Team understands that there are some budget templates under development with NIH and NSF spreadsheets in beta test.

- **Recommendation: Budget spreadsheets for each major federal agency and for non-federal sponsors should be developed immediately and implemented with staff. Template spreadsheets should be available to faculty to utilize.** Template spreadsheets are relatively easy to develop and exist at a number of universities. Implementing these forms will provide a level of consistency across budget services and will assist those faculty who are drafting their own budgets.

The Office of Communication, in addition to the Specialists, monitors sponsor policies and changes and communicates this information to the SRD staff. A member of the Office of Communications sits in on the SRD staff meetings which helps strengthen the exchange of information.

A series of workshops are offered in the fall and spring as well as occasionally brown bag lunches on hot topics. During the last year the workshops had 320 attendees (71 attendees were faculty). The workshops are a valuable mechanism for sharing information about particular aspects of proposal development and submission.

Once each semester a proposal writing workshop is offered. Attendance is generally around 10-20 individuals. Although the focus of the workshop is for faculty, it was reported to the Review Team that the majority of attendees are students. It was reported to the Reviewers after the site visit that the majority of proposal writing workshop attendees are project staff who report to a PI. With the greater emphasis on hiring research faculty and the continued emphasis on building the research enterprise, the role of Foundation staff in teaching proposal writing may deserve some closer attention. While the "Professors helping Professors" (PhP) program provides such mentoring, it is a very selective (by nomination) process and serves a relatively small number of faculty. New faculty at research universities often come into the research process through their academic units that provide the appropriate mentoring needed for faculty who are building their funding track record. Some universities will organize faculty forums where faculty who have served as peer reviewers or who are successful at obtaining external funding can share their advice to junior faculty.

- **Recommendation: The VPR and Deans should explore mechanisms to supplement the "Professors helping Professors" program with the intent to provide all faculty new to proposal writing with an effective networking system and access to educational offerings about proposal writing.**

NCURA Standards 1.A.iii - Proposal Review and Submission

Sponsored Research Development Specialists review sponsor proposal guidelines and assist investigators in preparing proposals. Proposal Submission Guidelines on the SDSURF website describe the requirements and processes to submit proposals. If proposed terms and conditions appear to impose additional burden upon the investigator/institution or are contrary to policy, the Specialists seek guidance from the Director of Sponsored Research Development or staff in Contracting & Compliance. The Sponsored Research Development Handbook contains information on proposal approvals and routing (section IX), proposal submission (section X), and tracking of a pending proposal (section XI).

Each Specialist is assigned workload by specific college, department, and/or centers. This is a common model for sharing workload and allows for some commonality in type of proposal and sponsor as a result of the academic discipline. Each faculty member from that assigned area works exclusively with their Specialist, or a back-up Specialist in the absence of their assigned Specialist.

During proposal review, the DS provides assistance with:

- Review/interpretation of guidelines and regulations
- Budget development
- Develop administrative sections of proposal documents
- Forms
- Facilitation of University review and approvals

- Guidance on institutional policies and procedures
- Submission of application via electronic or paper

Approximately 1,200 proposals are submitted annually.

The Specialists utilize a *SRD Handbook* and numerous checklists in their review of proposals. The Handbook is written as a textbook and contains a thorough description of procedures and process, from proposal development to the point of award or rejection in 14 sections. The *Handbook* appears to be an excellent training guide, and complete with many details of the process.

There was widespread confusion over F&A. This extended from voluntary waiver of F&A, to F&A distribution, and to how F&A was used. More complete discussion of F&A distribution is discussed in a later section of this report. In terms of proposals, if a PI indicates that the sponsor does not pay full F&A as their policy, the Specialist will document in the proposal file an e-mail or a printed statement from the sponsor. This is the typical practice found in sponsored program operations. In terms of voluntary F&A waivers, many faculty believe the Specialist makes that decision. The VPR indicated the Deans make that decision. The Deans indicate that they try not to reduce F&A below 8%, but ultimately have the authority to voluntarily reduce the F&A. The SRS indicated that the faculty member e-mails the SRD Director, who works with the Dean to reach agreement. It was apparent to the Reviewers that there was a lack of transparency in the process or decision-making.

The determination of voluntary waiver of F&A should clearly be vested in the University. It is however, an unusual practice to have Deans making this determination rather than the Vice President for Research, or the University Authorizing Official. The ramifications for voluntarily waiving F&A cut across many factors, including: serving to reduce the negotiated F&A rate, precedent setting with a particular sponsor, and impact on returned F&A allocations for research initiatives.

Information provided to the Reviewers after the site visit indicated that the current procedure was for the Deans to make a recommendation rather than a decision and for the Vice President for Research to make the determination. It was clear from discussions with all stakeholders that the process for decision-making and who held the authority for the final decision was not clear.

- **Recommendation: The decision for voluntary F&A waivers should reside with the Vice President for Research with rationale and a request for approval submitted through the Deans and that process should be clearly communicated to staff, faculty, and Deans.**

A new process has been recently implemented to help address cost sharing needs in proposals. An amount of money has been set aside in a central fund called the "Research Endowment" that annually generates about \$60,000 to assist with cost sharing needs. This is an excellent direction and fills a critical need of institutional support for competitive proposals that require some level of cost sharing dollars.

What is unclear is the strategic process guiding the decision-making for the application of these cost-sharing dollars. Many proposals can utilize cost sharing dollars; some sponsors may require this contribution while others may be more competitive if included. . Most research universities establish a central pool of funds to support cost-sharing, develop a very clear expectation for strategically applying those funds in selected proposals, and that decision would reside centrally. Because the amount of money is relatively low, it becomes even more important that the funds be leveraged with proposals that will benefit the University's research vision and direction.

- **Recommendation: The VPR should critically assess the process and priorities for funds allocated to support cost sharing and how use of those funds could be aligned strategically with proposals that will move forward the research vision and direction.**

The distinction between Request for Proposals (RFPs; Request for Bids-RFBs; Request for Quotes-RFQs) and other competitive proposals was not apparent in discussion with the Specialists and it appeared that the staff were unaware that RFPs require some additional consideration. The Review Team was told that terms and conditions of RFPs are not reviewed as they often are not provided to them, or if there was some question related to the RFP they would contact the sponsor.

RFPs are developed as a competitive bidding process and as such, the work to be performed and all surrounding terms and conditions that come with the award are spelled out in the RFP package. It would be unusual for an organization to be able to receive any information other than the RFP package as that would provide an unfair advantage to that organization. For RFPs, if an institution cannot accept any of the terms or conditions, that must be spelled out in an exception letter and submitted with the proposal. Once a proposal has been submitted, the submission indicates that the institution is accepting all the terms and conditions listed in the RFP package.

Research universities will critically review the entire RFP package terms and conditions at the outset, along with the proposal. This often requires close work with faculty to provide sufficient time for review of those terms and conditions to determine if an exception letter must be sent with the proposal.

- **Recommendation: SRD should develop education, training, and guidance for all staff on the competitive bid process for proposals (RFPs, RFBs, RFQs) and a process that will include critical review of terms and conditions prior to proposal submission.** Clear communication should be extended to faculty about the need for pre-submission review of terms and conditions in the bid package.

Investigators are advised to allow sufficient time to write proposal text, develop project budgets, obtain budgets and approvals from subrecipients/subcontractors, and complete all required internal reviews. The Guidelines suggest faculty submit proposals to the SRD two days or more prior to the submission deadline to allow for the review to be completed, copies made and the proposal to be submitted by mail or on-line. However, it appears that in practice, the review and approval of the proposal and the commitments made in the proposal, routinely occurs at the last minute, and may occur in only a few hours. The practice is to accept all proposals

submitted, regardless of when they are received prior to a deadline. While there is a “recommendation” that proposals be submitted to the Foundation several days prior to the submission deadline, this is not enforced or even remarked upon. The Review Team heard repeatedly from the academic stakeholders that they could submit their proposals at the last minute and conveyed a sense of entitlement to do so (although it appeared to be recognized by some of this stakeholder group that this was a luxury). This is not typically how business is conducted at research universities. Perhaps in an attempt to provide service to the faculty, the approach to accept proposals whenever they arrive and without comment has occurred. This approach creates a risk and stress on the operation that should be critically assessed and addressed.

In most cases, it is not reasonable to expect that proposals can be adequately reviewed for adherence to all federal and sponsor requirements, corrections made, endorsed, and mailed within a few hours. This is particularly likely to cause a problem during heavy deadlines. Universities make a commitment when submitting a proposal that the costs for carrying out the activity are defined fairly in relation to the work proposed. All contributions described in the proposal, whether it appears in the narrative, budget, or another part of the proposal, become part of the commitment made by the university when it is authorized for submission. The majority of research universities will have a clear and published expectation for a final complete proposal to be received within a minimum number of days prior to the submission date (3 days, 5 days, 7 days). This time allows the staff to conduct the review appropriate for assessing commitments made wherever they are stated in the proposal as well as compliance requirements (such as export controls).

Late proposals are a fact of life and will never be completely eliminated, but conversely, staff must be given sufficient time on a routine basis to fulfill the roles and responsibilities assigned to them.

- **Recommendation: The VPR, Deans, and SRS need to collectively communicate the expectation for final proposals to be received prior to the submission deadline and a clear explanation as to the review process and need for the institution to understand and stand behind all commitments made in proposals.** With this communication, investigators can be informed that late submissions will receive a lower level of review prior to submission and are subject to being rescinded pending a later review and identification of issues that cannot be resolved. SRS should communicate with the VPR and Deans about persistent offenders, understanding that there are always exceptions and emergencies that occur.

The review of proposals proceeds through multiple layers. Initially the Specialist works with the faculty member on the proposal and prepares it for review. The proposal then proceeds from the PI, to the Department Chair, to the College Dean, and back to the Specialist; each area providing approval. The SRD Director serves as signing authority for the Foundation, reviews the work of the Specialist and in only a few cases, proposals may be returned to the Specialists for clarification (the Review Team was told 2 percent of the time). After the SRD Director has reviewed the proposal, it goes to the Director of DRA who serves as the University Authorizing Official. Once signed by the DRA, it is returned to the Foundation to be submitted.

The Reviewers were somewhat confused by the need for DRA approval. Executive Order No. 890, Administration of Grants and Contracts in Support of Sponsored Programs, Article 3.1.1, states “Proposals for Sponsored Programs shall not be submitted to the Sponsor without prior written approval of the president of the University or the president’s University designee and of the chief financial officer of the University or the chief financial officer’s University designee.” The DRA Director acts as the Institutional Official in approving the proposal. However, various CSU documents refer to SDSURF as an auxiliary organization “legally responsible and accountable to the sponsor for the use of funds provided and the performance of the sponsored program(s)” administered by SDSURF. Because the Institutional Official generally agrees to these responsibilities by signing the proposal, it was unclear which institution takes the lead.

The DRA Director reviews the proposal for: compliance with university policies and procedures; outlying risk areas; and alignment with the mission and interest of the university. The Guidelines for Proposal Review and Approval by Authorized Institutional Official document indicate that the DRA Director is performing a “risk management” function that anticipates problems and implements corrective actions before a proposal is submitted. Documents indicate that the SRD Director reviews the proposal for: adherence to institutional and sponsor requirements; budget accuracy; identification of all required compliance reviews; special institutional commitments, such as cost sharing; and adherence to the general mission of the university. From start to finish, proposal routing involves at least four levels of review beyond the PI, more if personnel from other departments are involved. Considering the volume of proposals and staff workload, this review process appears burdensome and may not necessarily yield commensurate benefits.

The Review Team recognizes that academic signatures are common at research universities and an important part of department, college, center review of programmatic aspects of the proposed work. There seems to be an excessive amount of review and re-review being conducted within SRD and between SRD and DRA.

- **Recommendation: DRA and SRD need to assess critically the multiple reviews and identify how the process might be streamlined by shared checklists, delegation of signature, or other techniques that will simplify the review process.** If in fact a University Authorizing Official (UAO) is a required signature as part of the guiding policies, then simplifying the review process by training SRD to document the review of those key areas reviewed by DRA will improve staff efficiencies. If the UAO is not a required signature but rather added as a technique to insure that the University controls the commitments made through proposals, then a simpler approach might be devised. Given the very low percentage of proposals that require correction after review by the SRD Director, there is some rationale for delegation of the Director signature to those Specialists that have demonstrated appropriate expertise in their positions.
- **Recommendation: Representatives from SDSURF and DRA should examine their roles and responsibilities in order to streamline the proposal review process.** Participants should identify issues requiring SDSURF or DRA action *before* a proposal is submitted to the sponsor and determine which of those are significant.

For issues such as human and animal involvement, conflict of interest, and biosafety that are handled post-submission, these should be given a cursory review to ensure identification on the routing sheet and relegated to a secondary, post-submission review process. This identification could be confirmed by lower level staff. If there is overlap in reviewing a significant issue, responsibility should be assigned to one individual in order to streamline the process.

- **Recommendation: Authority to review and approve proposals should be delegated to a lower level within the SRD organization when staff demonstrate proficiency.** In order to reduce proposal review responsibilities on the SRD Director and to recognize those individuals who have responsibilities for proposal preparation, it is appropriate to delegate limited signature authority to the Sponsored Programs Coordinator and those Development Specialists who have demonstrated a high level of skill, knowledge, and independent decision-making. Typically, delegations are limited to proposals at an annual dollar amount requested in the proposal budget and are sufficiently large to eliminate a bottleneck and distribute proposals equitably among the staff.

The Office of Communications website contains a list of those sponsors that have placed a limit on the number of proposal submissions from an institution. Faculty who are interested in submitting to a limited submission competition will write a 2-page white paper and submit it to the college associate dean and the SRD Director. If the SRD Director receives more than one white paper and from different colleges, it appears that this person will notify the colleges. Deans often select a committee to determine the proposal to go forward. If a decision cannot be reached, the VPR will make the final determination. The SRD Director maintains communication with the Specialists so they are aware of which proposal will go forward.

The process appears to work and there did not appear to be any concerns expressed to the Review Team.

SDSURF uses the InfoEd System to identify funding sources and manage proposal development and submission. This is all managed through an eRA portal. The SPIN (Sponsored Programs Information Network) module is a searchable database which allows faculty to identify funding opportunities. A companion module to SPIN is called SMARTS (SPIN Matching and Research Transmittal Service) which can provide to faculty automated daily alerts on new programs that match their keyword profiles.

The electronic routing of proposals is not in existence. The proposal, or at minimum a budget and abstract, is routed within the PI's academic unit for review and signatures (co-PIs, department chair, dean). If multiple academic units have faculty involved in the proposal, the routing form must also be signed by those faculty, their chairs and deans. The PI sends a completed proposal and routing sheet to the Development Specialist. The Specialist prepares the application for review by the SRD Director. Once the SRD Director reviews and approves, the Director routes the materials to the VPR or the Director of the Division of Research Affairs. The VPR or DRA Director provides final institutional approval and returns the proposal to the SRD Specialists who submit the proposal package to the sponsor.

Last year the RF submitted approximately 1,200 proposals. Every proposal was hand routed for SDSU and RF signatures prior to proposal submission to a sponsoring agency. Technicians are tasked to pick up and deliver proposals and routing sheets, along with other documents, twice a day or as needed. The technicians include among their duties courier services for obtaining the necessary routing signatures, which include the signature of the PI, Department Chair, Dean, Director of the Division of Research Affairs and the RF. Electronic routing of proposals for signatures would be very beneficial to RF and SDSU. The faculty felt that the non-electronic routing of proposals for signatures was a time consuming hindrance for them and were dissatisfied with the process. It was reported to the Review Team that InfoEd has electronic routing capability but it is either not in use or is not part of the package purchased by RF.

Proposals are prepared through the use of an electronic research administration (eRA) Portal. Completed proposals are developed and submitted through InfoEd to Grant.gov and other electronic based systems. The Proposal Tracking module of InfoEd has both a pre-award and post award function. It is used in proposal management as it allows for pre-award tracking and allows users to view the status of their submissions, view proposal approvals, monitor and set alerts for deliverable deadlines, attach award terms and conditions to proposals, and track details of the proposal such as budgets and reports. The faculty found the eRA Portal to be working effectively.

- **Recommendation: SDSURF should aggressively pursue implementation of an electronic proposal routing system to improve work flow.** There is a tremendous level of effort expended to move paper through the various signatories. As research volume increases, this paper-based approach will become unwieldy. Reviewers were told that staff is looking at an InfoEd program that would respond to this need and that would be compatible with existing systems. RF may implement and use what is available through InfoEd or look at other commercial products on the market. PIs should be brought into the selection process.

NCURA Standards 1.A.iv Collaborative Project Development

The SRD works with PIs to include collaborative projects in proposals. If requested, the Specialists will provide some assistance in organizing meetings for the PI. If a multi-disciplinary proposal involves different universities, the Specialists will do Memorandums of Understanding with other universities at the proposal stage and work with other universities to put the proposal together. The materials provided to the Review Team included a "subrecipient commitment form" and a "collaborator commitment form." Both forms provide an overview of commitments being made and terms and conditions that will flow with the collaboration. Both forms appear to be focused more on the contractual commitments between two organizations and include details such as statement of work, budget, budget justification, collaboration commitment form signed by the Authorized Official and other audit and conditional approvals. It appears that what is not being done is to secure a "commitment" at an earlier stage of developing a collaborative activity. Such a commitment defines areas (generally) as participation, budget, or cost sharing before a proposal is developed and submitted. Given the significant effort for preparing multi-disciplinary proposals and the importance of securing collaborators, this might be a beneficial step.

Once awarded, the sub-award is negotiated by the SRCC team.

- **Recommendation: SRD should explore models at peer institutions as relates to implementing MOUs or commitment letters on multi-disciplinary proposals at the pre-proposal stage.**

NCURA Standard I.A.v. Agency Liaison

SRD Specialists and staff in the Office of Communication appear knowledgeable about federal regulations, agency policies, agency systems and organizational structures of sponsors. This is typically done via a combination of electronic lists and publications and via attendance at national and professional conferences and training sessions.

- **Recommendation: None**

Award Acceptance and Initiation

Award acceptance and initiation includes review and negotiation of incoming awards for acceptability to the institution and to the investigators involved, formal classification and acceptance of the award by the institution, establishment of the award in the institution's financial system, notification of the terms and conditions of the award to all relevant parties, and issuance of any subawards associated with an award. Award acceptance and initiation processes are core to the success of the research enterprise since it is at this stage that the institution and investigators commit to the terms and conditions that will govern how each award is handled. The institution must have staff trained and authorized: 1) to review and negotiate award terms and conditions and ensure that investigators or others materially impacted by the terms have an opportunity to provide input prior to their acceptance and have a process to remain informed during the award negotiation process; 2) to deploy staff knowledgeable about sponsor regulations and requirements and the institution's research policies and practices; 3) to be able to properly discern among various types of agreements (e.g., grants, contracts, cooperative agreements, material transfer agreements, gifts, confidentiality agreements, etc.); and 4) to ensure that key provisions and requirements of awards are translated into useful guidance for faculty and other staff.

NCURA Standard II.D.i. Electronic Research Administration

SDSURF uses the SCT Banner grants module for financial management of all awards (including contracts). Noliweb, an imaging and workflow software system, links with Banner to manage the award files and documents. An award analysis for each award is prepared by the SR technician and reviewed by an SRA administrator. Awards that have been accepted or fully executed are electronically routed from SRCC to SRA for entry into Banner. Reporting requirements feed into a data table that alerts SDSURF Finance and Accounting of upcoming reports. Automated email advises the PI of the award receipt, fund number and assigned SRA administrator. Following award entry into Banner, the PI and designated project staff can access award information in the PI Profile website.

The IRB, IACUC, IBC and COI compliance committees are supported by the SDSU Division of Research Affairs. All records are maintained in DRA. There is no electronic data transmitted from the regulatory committees to the InfoEd database for proposals or to Banner/Nowlijweb for awards. An automatic feed of approval information, once a committee

protocol is linked to a proposal or award, would save time, eliminate data entry and reduce errors.

- **Recommendation: SDSURF and DRA should investigate software that would allow data from regulatory committees to populate proposal and award records.** One program currently available is Click Commerce that offers support and tracking for a suite of compliance functions.

The Reviewers received very favorable feedback from SRS staff about the PI Profile interface they use daily, along with Banner and Nolijweb, to manage awards. When PIs were asked what they thought of PI Profile, the Reviewers heard that it is difficult to use, the data is not current, and there is no easy way to forecast spending during the project period. Many indicated that they were forced to develop shadow accounting systems to track spending on their awards. Center directors also indicated that they could not use the PI Profile interface to generate reports on the activities of investigators within their centers. These perceptions may be due to the need for more PI/director training on how to use PI Profile, the design of the web interface based upon a misconception of how faculty use or want to use award data, or other causes.

- **Recommendation: SDSURF should closely examine PI Profile in order to better meet the expectations of the PIs and center directors.** A short survey in a web-based format, such as SurveyMonkey, may be able to quickly identify key problem areas or additional features that would improve performance of the PI Profile interface. A focus group of faculty, SRS staff, and IT support staff could then meet to evaluate the feedback, identify problems and strategize solutions. With some additional investment of time, PI Profile has the potential to be a very useful tool for faculty, as well as staff.

Instruction manuals for data input into Nolijweb and Banner are provided for training and reference to staff.

NCURA Standards 1.B.i. Review and Negotiation of Terms and Conditions

Awards are referred to an SRCC analyst who reviews the award documents following written procedures that are in place for grants and contracts/agreements. The review procedure utilizes detailed checklists covering critical issues of concern to SDSURF or SDSU and federal policy requirements. Description of the review process can be found in the SRD Handbook.

The SDSURF Technology Transfer and Commercialization office under Research Advancement assists in the preparation of cooperative research and development agreements for faculty research projects. TTC also advises on intellectual property language in proposal guidelines or contracts/agreements. External counsel is available to provide advice to the SRCC staff on terms and conditions or other issues that arise during the project period. Unfortunately, reviewers were informed that reliance upon outside counsel has delayed contract negotiations in the past.

- **Recommendation: SDSURF should identify the issues referred to outside counsel in the past to determine if they may be managed more effectively in the future.** Past input from counsel may have resolved an issue for one award, but the knowledge allows staff to more quickly resolve problems on future awards. Alternatively, SDSURF may determine that a few issues are low risk to the institution, allowing action to be taken as a business decision without counsel advice. In this latter case, it is critical to identify a clear path of campus consultation to make that decision. Finally, SDSURF may approach outside counsel to explain the time-sensitive nature of sponsored research and ask for improvement to the turn-around time.

The SRCC co-directors possess 28 years and 42 years of experience. New SRCC analysts meet with each of the SRCC co-directors and a training schedule is established. Topics covered over a four-week period include administrative tasks, grant and contract award review, and compliance approvals. Training on the development and negotiation of subawards is on-going as work is received.

Contract negotiations are conducted by the SRCC co-directors, who also draft agreements, perform internal desk audits, complete FFATA reporting of subrecipient data to the federal government and ensure relevant compliance requirements (IRB, IACUC, COI, IBC, export controls) are satisfied. The co-directors develop and implement policy and procedures related to contracting and subcontracting.

Internal procedures outline award criteria that suggest the need for a transition meeting between the SRD specialist and the SRA administrator. A Transition Meeting Request form is used to schedule and highlight the reason(s) for such meetings. Meetings may be scheduled at the time of proposal submission, when an award is pending, or when an award is received. The PI and other staff may be included as appropriate.

The Reviewers found adequate documentation of the institution's position on acceptable award terms, as well as negotiation strategies for contracts. Recommended negotiation tactics for contracts/agreements are also reasonable. A review checklist for awards can be useful to new staff and serve to document staff review in the case of future problems. However, this added requirement can be time-consuming for experienced staff and potentially delay the input of awards. Therefore, the Reviewers suggest SRCC evaluate the risks and benefits of reducing the checklists to streamline the award review process. Review might also be converted to a database-driven process so that data entry is reduced in the process.

NCURA Standards 1.B.ii. Ancillary Agreements Associated with Research Grants and Contracts

SDSU Research Affairs and SDSURF cooperate to manage intellectual property arising from faculty activities, including research. SDSU and SDSURF have websites providing brief guidance to faculty. Invention disclosures, disclosures of copyrightable works, and several modified material transfer agreement forms are provided on the DRA and Technology Transfer websites with required submission to the DRA. Confidential disclosure agreements are provided on the TTO website and signed by SDSURF. Faculty inventions are marketed and licensed by

SDSURF TTO. Some overlap exists between the two organizations, and the reviewers were informed that this sometimes leads to confusion for faculty seeking assistance.

- **Recommendation: The DRA and TTO websites should describe the transition of responsibilities from DRA (e.g., invention disclosure) to TTO (e.g., licensing) and include contacts for questions along that process.** The websites should clarify the responsible office for intellectual property forms and related questions, including those for invention disclosures, disclosures of copyrightable works, material transfer agreements, confidential disclosure agreements and CRADAs. Sponsored Research staff should be made aware of the contacts should they be asked for assistance.

NCURA Standards 1.B.iii. Subawards

An internal procedure entitled, “Sub-Agreement Initiation Procedures and Routing Form,” provides information and step by step instructions leading up to the issuance of an approved sub-agreement. Care is taken to flow-down appropriate terms from the prime award, including a request for FFATA data as needed. SDSURF utilizes templates when possible for sub-agreements, including those for federal sponsors, ARRA awards, and sub-awardees that are foreign entities, non-profits or for-profits. In addition, templates are available for pre-award commitments from subrecipients and collaborators.

A checklist aids in tracking internal review steps, the three-page SR Contracting & Compliance Subrecipient Review form documents the review of the SRCC analyst and co-director. An assessment of the financial status of the proposed sub-recipient is done by the SRCC analyst in conjunction with the Finance and Accounting Manager and the SRCC co-director. These individuals review the subrecipient’s most recent, independently audited, financial statement, including OMB Circular A-133 audits.

The Subaward Procedures (section 6, attachment O) address “unplanned,” i.e., unapproved, sub-agreements by having the SRA administrator notify the SRCC analyst that an award is needed. These “unplanned” subawards are handled on a case-by-case basis; however, the abovementioned procedures should make mention of seeking sponsor approval prior to drafting or issuing the sub-agreement.

- **Recommendation: The Subaward Procedures should be revised to identify who will contact the sponsor to gain approval of an unapproved subrecipient.**

Reviewers found the procedures for issuing subawards to be thoroughly described and documented. SRCC developed various forms and templates related to subawards in order for staff to expedite issuance of an award. The Reviewers heard some complaints from faculty about long delays they experienced in the issuance of subawards, e.g., 9-10 months to issue subawards under an NIH research grant. Staffing level and staff training appear to be two possible factors attributing to the delays. The reorganization that established the SRCC hoped to reduce the time necessary to issue subawards, and management should continue to monitor subaward backlog and time to complete in order to preempt problems.

- **Recommendation:** A system to track the pending subawards and subawards that are in process should be established. This information should be available to SDSURF management, and individual PIs should receive regular communications regarding their awards.

NCURA Standard 1.B.iv. Award Acceptance Process

Awards received by SRD specialists are linked to pending proposals or existing awards. If there is no proposal on file, the specialist contacts the PI to obtain a budget and scope of work and obtain signatures on the routing document. During the acceptance of an award, award documents are reviewed by an SRCC analyst who follows internal procedures for grants and contracts/agreements. Guidance is provided by the Contract/Agreement Review Procedures, which includes a seven-page SR Contracting and Compliance Contract/Agreement Review form, and Grant Award Processing Form Instructions, which includes a one-page Grant Award Record form. These procedures document review and reconciliation of key areas of the budget, scope of work, and agreement terms.

Reviewers found the procedures for acceptance of awards to be clear and comprehensive. The process itself is direct and aided by electronic processes.

- **Recommendation:** None.

NCURA Standard 1.B.v. Award Activation and Notification

Awards are received electronically in an Awards email box or in hard copy. Once awards are reviewed and/or negotiated, the awards are electronically routed from SRCC to the assigned SRA administrator or the SRA director if an administrator has not been assigned to the PI. SRA staff requests a fund assignment for the award from Finance. Automated emails advise the PIs of the award receipt, fund number and assigned SRA administrator. Reviewers found the process to be straightforward and efficient.

Key information, deliverables, reporting requirements, and special terms and conditions are highlighted in the Nolijweb file. These items are also input into Banner, which is available in summary form to the PI via PI Profile. The reporting schedule feeds into a data table that generates reminders to SDSURF Finance and Accounting for financial reports, invention reports, and other reports. Reviewers found this process to be satisfactory.

- **Recommendation:** None.

Award Management

Extramural policies are often broad and written in a manner that leaves room for interpretation. Sponsors expect their funds to be treated in a manner that recognizes specific terms and conditions; however, sponsors also recognize that institutions are able to accomplish their research in a variety of methods under a range of administrative structures. In many areas, both federal and non-federal sponsors rely on the recipient's own policies and procedures. Within this framework, an institution has the ability to establish its operations, including policies

and procedures, to optimize its research enterprise and appropriately allocate resources. These standards need to be balanced against the needs of the researchers to conduct their projects.

NCURA Standards I.C.i. and C.ii Fiscal and Administrative Management

SDSU utilizes the Banner grants module to track awards and expenditures and other financial data related to the award are managed through the Banner finance and human resources modules. Each award has a unique number. The Grant Ledger, within the Banner Financial system, tracks income and expenses for the life of the award. The Banner system integrates with a web-based system that was developed in-house, the PI Profile, to provide real-time access of award and financial data to PIs. Monthly budget reports are available through the PI Profile tool and both the PI and also project personnel authorized by the PI have access to financial data. The Reviewers heard from the RF systems group that there are lists of enhancement requests. However, the faculty groups had the perception that the PI Profile tool did not meet their needs and in fact they often did not use the system because it was cumbersome and encumbrances were out-of-date. In the discussion with the center directors, this tool did not provide them with the data they needed to manage their operations and they often utilized shadow systems to provide them with the information they needed.

- **Recommendation: In order to strengthen the relationships between sponsored programs support and the faculty, PIs should be provided the opportunity for input into the enhancement request process. We would encourage an “IT Focus Group” that could discuss the needs of the stakeholders and prioritize the enhancement requests.** The need for PIs to have the financial information they need to manage their awards is a consistent theme across all research institutions. Obtaining input from the various stakeholder groups, including deans, center directors and PIs would provide an important value added service of the RF.

As a recipient of federal funding, the SDSURF is subject to the Office of Management and Budget (OMB) Circular A-133, Audits of States, Local Governments, and Non-Profit Organizations. The Reviewers noted that there were no significant deficiencies or compliance findings in the independent auditors report. Staff are aware of the reporting requirements for ARRA funded awards in the Schedule of Federal Expenditures and are also knowledgeable about the quarterly 1512 reporting requirements for ARRA funded awards.

SDSU has a comprehensive manual of Accounting Policies and Procedures that includes detail procedures on bank accounts, cash receipts, cash disbursements, bank reconciliations, petty cash funds and unclaimed checks. There are formal policies and procedures for issuing subrecipient agreements and for monitoring the performance of subrecipients. Reviews of subrecipient A-133 reports are maintained by the Finance and Accounting Manager. The Contracting and Compliance staff perform a subrecipient review which is document in a comprehensive checklist. Staff are aware of the Federal Financial Accounting Transparency Act requirements for reporting of subawards to the federal reporting system.

The RF staff in sponsored research services are responsible for the preparation, distribution, collection and monitoring of Effort Reports, which is a compliance requirement of OMB Circular A-21. The institution currently utilizes a database developed for the purpose and

downloads information from the Banner financial system, the SDSU payroll system and other database programs. Effort reports are distributed electronically to faculty and original signed reports are returned and are electronically scanned. There is a documented follow-up process for late reports. As part of a post award audit performed in 2010 by the Office of the California University System Auditors, comments were made regarding the timeliness of effort reports. It was noted that the system used is a very labor intensive process.

- **Recommendation: In order to strengthen the electronic research infrastructure, it is recommended that the RF consider the acquisition of a commercially available Effort Reporting solution.** The faculty should be involved in the vendor selection process of an electronic effort reporting solution that will reduce their administrative burden and improve efficiencies.

The RF has F&A rates that are negotiated with their cognizant federal agency. There is a formal Research Support Funds Policy that outlines how recovered Facilities and Administrative Costs are used to support the research enterprise. In addition, the General Fund Budget for the RF describes the process. There is a formula for distribution that includes the practice of distributing funds in the year following the year in which the F&A was earned. Funds are distributed to the college, to PIs that have awards with full F&A and to PIs that have multiple awards with a high volume of F&A costs. For fiscal year 2010-11, the amount of research support funds distributed was \$3.4 million. PIs can use this distribution for bridge funding, to hire additional support staff, and to pool their funds to support the University research agenda. This process for distribution is documented and is understandable to the deans of the colleges; however, it is not clear and understandable to the PIs that are impacted. This uncertainty contributed to the culture of a lack of a clear partnership between sponsored programs support and the faculty

- **Recommendation: In order to strengthen the partnership between sponsored programs support and the faculty, the RF should consider greater transparency in the actual calculations of Research Support Fund (RSF) distribution to individual faculty members.** The awareness and understanding of this process by the faculty will strengthen the shared vision of the research community and provide a greater understanding of how the RF manages its financial support.

SDSU has systems in place to distinguish between the acquisition of goods and services and subrecipient agreements. There is a procurement program in place with a very well document policy and procedure manual. There is the need to provide an effective tool to purchase items as a supplement to the formal purchasing methods in place.

- **Recommendation: Additional education of PIs on the procurement card program may be warranted.** In interviews with PIs, they acknowledged that the program was good to have in place but some did not find that the procurement card was effective for their needs. Involving the PIs in the conversation may produce ways that the program could be expanded while maintaining the necessary controls.

Sponsored Research Administration staff work closely with Finance & Operations and Facilities Planning and Management to manage all fiscal aspects of grants and contracts

including budgeting and budget adjustments, equipment purchases and capitalization, cost transfers, invoicing, letter of credit draw downs, financial reporting, collection and close-out. The accounts payable area has a travel coordinator that reviews all travel reimbursement requests and the turnaround time for processing appears to be satisfactory. However, as noted in the section on Education, staff turnover has impacted the ability to provide a consistent level of services. Faculty have indicated that they have requested that a change in personnel be made for handling of their awards when they don't receive adequate and knowledgeable service. They have also indicated that their questions often fall into a black hole while they await a response and PIs have also indicated that they have received inconsistent responses. PIs also feel that the culture of the post award office seems to be "no" rather than "how can we work together to find an appropriate solution to what you need to do."

- **Recommendation: As new staff are in the learning phase of their jobs, they could be paired with a more senior person to serve as their mentor and utilize that person to discuss questions that they are not sure how to handle.** The need to understand federal, state and sponsor regulations makes the post award job a challenging one as is the assignment of workloads; however, the responsiveness to PIs is critical and it is important that it is properly managed. Staff in the post award office should also have the ability to call a sponsor for clarification of a question, rather than tell the PI to contact the sponsor. Supervisors can get involved, as needed, in the more challenging questions.

Recharge center charges are processed by an invoice generated by the center, which is routed to the PI for approval and the approved invoice is submitted for review and entry into the Banner system via journal vouchers. Staff have identified that this process is not always timely. This can impact the PIs ability to have an accurate financial picture of their award.

The Cost Transfer policy and process is well documented and includes a description of the timeliness, the approvals needed and a clause for extenuating circumstances. They are processed by journal vouchers.

- **Recommendation: SDSU could consider the implementation of an electronic version of the Journal Voucher so that it could be completed on-line and then submitted to the appropriate approvers in order to enhance timeliness of processing into the financial system.** This process would provide for a more efficient method and would also provide more timely processing of charges to the PIs awards, enabling them to have a more up-to-date view of their available balance.

Research Ethics

Sponsored program activities come with a variety of ethical responsibilities that are shared by investigators and the institution. While institutions are expected to have appropriate policies and oversight committees in place, the principal investigators and the institution share the ultimate responsibility that the conduct, and those of their colleagues and students, are within acceptable practices.

The commitment to an effective research ethics program is a visible demonstration of the University's willingness to maintain the trust of its major constituencies. Effective research ethics programs are based on some guiding principles such as:

- Stewardship of sponsor and donor funds
- Ethical conduct of research to assure the objectivity of the research and the integrity of the data
- Protection of human and animal subjects
- Safety of the employees participating in the research enterprise
- Protection of the environment for both University employees and student and the community they serve

Research ethics programs are constantly challenged with ever increasing regulations, guidance and policies. Each institution should have in place a process to monitor these changes, assess their impact on the specific institutional programs, identify and manage the risk for their specific institution and research portfolio and respond appropriately with policies, procedures, auditing and monitoring programs, educational initiatives and the ability to receive and respond to allegations of wrong doing.

NCURA Standard I.D.i. Project Integrity

SDSU has a variety of policies and procedures in place regarding Project Integrity. These policies and procedures are housed with the Division of Research Affairs. The Vice President for Research is the Institutional Official, while the Director, Division of Research Affairs is the Institutional Official Representative. It is through the Director, Division of Research Affairs, that SDSU houses the operation and management of these regulatory and other compliance committees.

The Reviewers observed that there is only one analyst that facilitates the management of the IACUC, IBC, Copyrights, Patents, and other DRA duties. This appeared to the Reviewers to be insufficient personnel to facilitate the needs of the users in all of these compliance areas. Understaffing in the compliance areas places the University at great risk.

- **Recommendation: SDSU should assess the level of administrative support provided to the major compliance areas and provide a level of support that will guarantee that all requirements such as protocol submissions, review and monitoring are adequately managed.**

SDSU has policies and procedures in place for the major committees such as IRB, IACUC, Conflict of Interest, and IBC. The Review Team observed that the Division of Research Affairs, which has oversight for the IRB, IACUC, COI, and IBC, MIS, and RCR, has put into place policies and procedures for all of the compliance areas but the operations and management of these committees needs to be updated according to current compliance standards.

In addition, outdated electronic compliance systems may hinder the submission and processing of protocols submitted by PIs and associated with these major committees. This may cause delays in the conducting of research and the reporting of research results to sponsors.

- **Recommendation: SDSU should update and post on the Division of Research Affairs website the most up to date information regarding policies and procedures for all committees.** This link should be cross-referenced on the RF website should researchers use the RF website as their starting point.
- **Recommendation: SDSU should annually review the operation and management of the compliance committees as well as their policies and procedures with faculty to obtain and utilize their input in order to enhance committee operations and increase faculty/PI satisfaction.** The outcome of the review should be addressed by each committee chair in a timely manner and should be discussed in an annual report by the committee chair to the Vice President for Research.
- **Recommendation: SDSU should establish processes and procedures for 1) the management of new compliance requirements, including dissemination of such requirements to faculty and staff and 2) the education and outreach requirements that may be associated with new or changing rules and regulations.** This may be accomplished through a newsletter, periodic emails, and/or an announcement section of the DRA website.
- **Recommendation: SDSU should invest in commercially available electronic systems for the routing, processing, and management of research related compliance committees, such as IRB, IACUC, IBC, and COI. There are many commercially available electronic products on the market to assist in the management of compliance related protocols and compliance committees.** As an example Huron Company through its Click Commerce division has commercially available software system modules for IRB, IACUC, IBC, and IACUC. One can purchase one or all of their compliance modules. The Reviewers also recommend that the faculty be involved in the selection of any compliance electronic system or module.

SDSU has in place a policy and procedures for dealing with allegations of misconduct in science. This policy addresses all the major areas for dealing with research misconduct. This policy and related procedures are located in the University Senate Policy File, August 2008, page 56.

- **Recommendation: SDSU should place their policies and procedures for handling allegations of misconduct in science on the Division of Research Affairs web site.** Although the policy and procedures are adequately covered in the University Senate Policy File, having them on the DRA website allows for easy access by all members of the University community.

Under policies and procedures that govern Responsible Conduct of Research (RCR), SDSU does have what the Reviewers would consider “quasi” policy and procedures in place. These policies and procedures are considered quasi as they are addressed through the Division of Research Affairs document on Responsible Conduct of Research Training Plan.

The Responsible Conduct for Research (RCR) activities at SDSU are designed to meet the requirements of both NIH and NSF. However, it did not appear to the Review team that the eight hours of contact required under NIH regulations, is in place. The SDSU website indicates that the DRA is developing a resource list that can be used to address the eight hours of contact time required under the NIH regulations, yet there is no material that specifically addresses how a PI should provide for this eight hours of contact training. In addition, the SDSU website that initially pops on the computer screen discusses only NSF RCR. It is only when one drills down into the RCR training forms, RCR training plan, and RCR Statement for Proposals that NIH and its requirements are mentioned.

- **Recommendation: SDSU needs to establish a clearly articulated Responsible Conduct of Research (RCR) program.** This program should include the eight hour of contact needed to comply with the NIH regulations. The Division of Research Affairs website should be updated to reflect both the NIH and NSF requirements in this area.

The Conflict of Interest (COI) Committee is operational and appears to have policies and procedures in place. The Reviewers observed that after a PI discloses to the COI Committee, if a conflict of interest is identified, the PI is asked to design a conflict of interest management plan and the management plan is then reviewed by the Committee and approved or disapproved. However, once a management plan has been approved, there is no monitoring of that plan by the COI Committee. With no monitoring of the COI management plan, the Committee does not know if the plan is operating in accordance with what they approved. This lack of monitoring can place the University at risk.

The Review Team observed that the COI Committee is not reviewing PI consulting agreements when they are reviewing financial conflict of interest disclosures and is, therefore, not reviewing all aspects of perceived or inherent financial conflicts of interest.

It is not clear to the Reviewers that SDSU has a system in place for monitoring of new requirements, external trends in audit and compliance, and risk areas at the national level. SDSU does not appear to have a system in place for addressing new requirements, assessing the risks of those new requirements, or creating policies and procedures including education and outreach.

The Reviewers observed that in all areas of research compliance there are inadequate electronic systems to help facilitate the development, distribution, and monitoring of protocols and committee workload.

- **Recommendation: SDSU should develop through the Conflict of Interest Committee processes and procedures for yearly monitoring of approved PI COI management plans.**

- **Recommendation: SDSU through the COI Committee needs to develop processes and procedures for obtaining and reviewing PI consulting agreements prior to approval of a COI disclosure or COI management plan.**
- **Recommendation: SDSU through the COI Committee must disseminate to the IRB all IRB related COI management plans and updates to the management plants that it approves.**

NCURA Standards I.D.ii Human and Animal Use

The SDSU Institutional Animal Care and Use Committee does not have a fully functioning Occupational Health Program. The Program in place currently consists of a medical questionnaire that an animal user completes and submits to the Biosafety Officer. The Biosafety Officer indicated to the Review Team that they review the medical questionnaire, who determines whether the animal user should contact their physician. It is the observation of the Reviewers that the Biosafety Officer should not be the person reviewing the medical questionnaire and deciding whether the animal user should contact their physician, as this can cause problems with HIPAA and other privacy requirements.

In the area of controlled substances used by researchers, the Review Team observed that the Biosafety Officer holds a single license under the University for controlled substances and disseminates controlled substances to PIs who use animals. DEA regulations regarding licenses for controlled substances on campus require that an individual PI must hold the license for controlled substances. In addition, PI's may not transfer controlled substances to any other person without prior approval by the DEA and SDSU policy does not permit such a transfer. Both persons must be licensed specifically for the controlled substance being transferred. The form for transfer is available on the DEA website. It is a one-time only permit. The PI must apply for a separate permit each time a transfer is needed.

- **Recommendation: SDSU needs to develop and implement a comprehensive Occupational Health Program that includes review of the medical questionnaire by a HIPPA certified individual and a process to refer all animal users, including faculty, staff and students who may need medical care in order to be able to work with animals to a physician(s). In addition documentation and certification that animal users referred to physicians are medically able to work with animals needs to be developed as quickly as possible.**
- **Recommendation: SDSU needs to develop detailed SOPs in all areas of animal care, house them together, and disseminate them to users.**
- **Recommendation: While some DEA agents have different perspectives and might be directing institutions differently, SDSU should look into their use of a single DEA license for all researchers using animals. While some institutions with teaching veterinary clinics may have veterinary teaching labs, DEA requirements regarding controlled substance licensure**

need to be addressed by the Biosafety Officer and the University with the DEA. Policies and procedures in this area need to be developed, disseminated, and implemented.

The staff of the IRB lacks designated leadership. Currently three IRB specialists are employed but they share in the administration and management of the IRB. No one staff person takes ownership for or addresses the concerns of the IRB staff or faculty. As an example, while the Virtual IRB electronic system appears to be operational, frequent failures of the system and loss of protocols submitted by faculty were reported. The burden of dealing with a poorly functioning system and extrapolating data from it has resulted in an unusually lengthy time for review. Currently it is taking two to three weeks to review and approve exempt protocols. In most universities this process takes two to four days.

The IRB does not perform continuous review of approved protocols. According to federal Office of Human Risk Protections (OHRP), an IRB must conduct continuing review of research at intervals appropriate to the degree of risk, but not less than once per year (45 CFR 46.109(e)). In addition the IRB must prepare, maintain, and follow written procedures for:

- “Conducting continuing review of research and for reporting its findings and actions to the investigator and the institution;
- Determining which projects require review more often than annually;
- Determining which projects need verification from sources other than the investigators that no material changes in the research have occurred since the previous IRB review; and
- Ensuring prompt reporting to the IRB of proposed changes in a research activity and for ensuring that changes in approved research, during the period for which IRB approval has already been given, may not be initiated without IRB review and approval except when necessary to eliminate apparent immediate hazards to the human subjects (45 CFR 46.103(b)(4), 46.108(a), and 46.115(a)(6)).”

The current method of review used by SDSU calls for faculty engaging in human subject research to submit a yearly update. While this is a part of continuous review it is not the complete process. The regulations call for ongoing monitoring including review of consent forms, proper housing of the consent forms, and a review of ongoing processes employed by researchers in their use of human subjects in their research. This does not occur at SDSU.

The IRB is required to review financial conflict of interest (COI) that a PI may disclose prior to approving a protocol. While the IRB does get COI notification of approvals if human subjects are involved, if approval involves the development of a conflict of interest management plan, the IRB is not sent a copy of the plan to review. The conflict of interest plans are an important part of assessing financial conflict of interest and its relationship to human subjects, and copies of such plans should be given to the IRB, prior to their review of an IRB protocol.

While the IRB staff appear to have a good understanding of IRB regulations, they are not nationally certified. Given that the IRB reviews behavioral protocols as well a clinical trial

protocols, at least one member of the staff, if not all, should obtain national certification and participate in PRIM&R and other professional organizations to obtain up to date information on IRB best practices and federal requirements. This information should be disseminated to all faculty who use human subjects in research or sponsored projects.

The Review Team learned that the Director of Research Affairs signs proposals submitted to funding agencies and is a voting member of the IRB. It is recommended by OHRP, that any person with signature authority over proposal submissions should not be allowed to vote on the IRB as this creates a perceived conflict of interest.

- **Recommendation: SDSU should designate one of the three IRB specialists as either the lead specialist or the IRB manager, allowing faculty to clearly know who administratively manages the IRB.**
- **Recommendation: SDSU should either devote the resources necessary to significantly update the existing IRB electronic system or invest in a commercially available IRB electronic system.**
- **Recommendation: The IRB at SDSU should develop and implement processes and procedures to continuously monitor IRB protocols.**
- **Recommendation: The IRB and COI committees at SDSU should develop a process to ensure sharing of conflict of interest management plans proposed by a researcher who is using human participants in his/her research. These management plans should be provided to the IRB prior to protocol review by the IRB.**
- **Recommendation: SDSU should make sure that the Director of DRA is not a voting member of the IRB. A number of options exist to remove the perceived conflict: the DRA Director could become a non-voting *ex officio* member, she could be a "guest" at the meeting, or her responsibilities for authorizing sponsored program proposals could be shifted to another individual.**
- **Recommendation: SDSU should require that at least one member, if not all members, of the IRB staff be nationally certified and attend PRIM&R or other organizations that can provide the most current information concerning the use of humans in research.**

NCURA Standards I.D.iii Biohazards, Radiation Safety, Bioterrorism

The Reviewers observed that SDSU appears to have a fully functioning program to deal with biohazards, radiation and laser safety and select agents. However, SDSU does not have a faculty laboratory users group. There is a need at SDSU to have a faculty laboratory users group which engages the researchers in discussion and prioritization of equipment needs, equipment maintenance needs, laboratory renovations, and other laboratory needs as they relate to individual faculty labs and core facilities.

- **Recommendation: A faculty laboratory users group needs to be established to document and work out plans for the university and RF to address aging facilities and equipment.**

Export Controls/Deemed Export Regulations

Other areas such as export controls and data security are also present at SDSU, yet they reside in the Research Foundation. The Research Foundation has in concert with the Office of Research Affairs engaged in training faculty, staff and other academic personnel on export controls and related issues. However, the RF website is limited in its discussion of export controls, focusing mainly on ITAR. The RF and SDSU program for preventing export control violations appears to be weak. The assessment of risk related to sponsored programs rests with the Co-Director of Contracts and Compliance in the Research Foundation. In addition there appears to be no one in the university managing export controls. To the Review Team there appeared to be no process in place to address export control regulations as they relate to shipments abroad, faculty foreign travel, visiting scholars or affiliated scholars on the university side. This places the University and its research at risk.

The San Diego State University Research Foundation is a nonprofit corporation chartered to augment the educational, research, and community services objectives of the university. A “fundamental research exclusion” as discussed in NSDD-189 is given to colleges and universities and reads as follows: "It is also the policy of this Administration that, where the national security requires control, the mechanism for control of information generated during federally funded fundamental research in science, technology and engineering at colleges, universities and laboratories is classification." The Review Team questions that if a federal research award that falls under export control regulations is given to the RF and is conducted in RF owned space is the work is done "at" a university. Having a clear priority established by the University Vice President for Research and the University Research Council that addresses the role of the RF in export control issues could address this issue and provide clarification as to the role of the RF in this area.

- **Recommendation: SDSU needs to develop and implement university-wide policies and procedures for export controls. This needs to be addressed by both at the University and the RF.** The RF export control web site and management of export controls needs to be more robust. The Division of Research Affairs needs to address issues of visiting scholars, faculty foreign travel, and visiting students as they relate to export control issues. All the services of the university including academic affairs, procurement, travel, and international affairs, need to be involved in setting up policy and processes to address export control regulations. A process for monitoring technology control plans and data security plans should reside within the Division of Research Affairs and should be monitored annually.
- **Recommendation: At SDSU the RF and the University Division of Research Affairs should work together in setting clear priorities that address the role of each in managing and overseeing export control policies, processes and procedures.**

APPENDICES

- Appendix A: NCURA Standards
- Appendix B: NCURA Peer Review Team Bios
- Appendix C: Charge to the NCURA Peer Review Team
- Appendix D: Site Visit Itinerary
- Appendix E: NCURA Resources



National Council of University Research Administrators

Scope and Standards for Peer Reviewed Sponsored Projects Organizations

This definition of “Scope and Standards” represents a statement of the extent of an NCURA Sponsored Peer Review. While recognizing that institutions are organized differently with various kinds of pre- and post- award services, this definition of “Scope” reflects the core operations of Research Administration. The “Standards” outlined below come primarily from the Council of Governmental Relations, “Managing Externally Funded Research Programs: A Guide to Effective Management Practices” (June 2005).

I. CORE OPERATIONS

A. Proposal Services

i. Collection and Dissemination of Funding Information

The institution has procedures in place to identify various opportunities (Federal, State, local, private foundations, etc.) to which faculty can apply for funding. A system is in place to disseminate to faculty information on current funding opportunities in an efficient, timely and easily accessible manner.

STANDARD: The institution has access to information on prospective sponsors and their requirements.

STANDARD: The institution provides faculty with information on sources of support for research and other scholarly activities.

ii. Proposal Development and Assistance

The institution has a process in place to assist faculty with responding to funding opportunities, including proposal writing, understanding and complying with rules, regulations and administrative requirements and help with electronic application processes.

STANDARD: The institution has trained personnel who are knowledgeable about sponsor regulations, requirements and procedures.

STANDARD: The institution has trained staff who advises investigators in preparation of compliant proposals.

STANDARD: The institution has appropriate procedures in place to allow it to access and utilize the electronic proposal, award, administrative, and financial management systems of the federal government or other sponsors.

STANDARD: The institution stays current with respect to the electronic research initiatives of sponsored projects sponsors.

STANDARD: The institution provides assistance for proposal writing and for proposal preparation.

iii. Proposal Review and Submission

The institution follows standard processes and procedures for review of the business, administrative, and financial aspects of proposals developed by their faculty and submits the proposal to the sponsor on behalf of the institution. Where necessary, the

administrative official who submits the proposal on behalf of the proposing organization also makes certifications and assurances to the sponsor. They commit the organization to the conduct of the project that the sponsor is being asked to support as well as ensure the institution will adhere to the sponsor's various policies and grant requirements.

STANDARD: The institution advises investigators in preparation of compliant proposals.

STANDARD: The institution has a comprehensive system in place that is designed to ensure compliance with federal, state and local laws.

STANDARD: The institution processes proposals in compliance with institutional and sponsor policies and procedures

STANDARD: The institution has procedures in place to coordinate internal competitions that limit the number of submissions per institution.

iv. Collaborative Project Development

The institution assists its faculty who wish to collaborate, either with other colleagues at their own institution or at other organizations, on a unified project.

STANDARD: The institution reviews the collaborative arrangements and determines if the proposed activity is appropriately and administratively manageable.

v. Agency Liaison

Institution staff are involved with proposal development, review and submission and have established methods of keeping up-to-date on changes to sponsor's policies, procedures and processes. Such methods may include, for example, subscription to electronic mailing lists, newsletters or attendance at outreach events, conferences and/or webcasts.

STANDARD: Staff have knowledge of the organizational structure of the sponsor and are able to contact the appropriate individual or office when they have questions.

STANDARD: The institution has trained personnel who are knowledgeable about sponsor regulations, requirements and procedures.

B. Award Acceptance and Initiation

i. Review and Negotiation of Terms and Conditions

Grants and agreements that provide sponsored funding require review by the institution of the terms and conditions that are part of the award. While many grants come with standard terms and conditions, many agreements have language that necessitates scrutiny prior to acceptance. All awards require an institutional evaluation for sponsor restrictions on such items as the use of funds, appropriate project personnel, publication rights, intellectual property, etc. to assure compliance with institutional policies that govern the research activities of the campus.

STANDARD: The institution has staff trained to review and negotiate agreement terms and conditions.

STANDARD: The Institutional staff is cognizant of institutional policies and practices with respect to ownership of intellectual property rights, publication, and acceptance of classified material, etc.

STANDARD: The staff is authorized to negotiate changes in award terms and conditions and has access to legal assistance, either institutional or external counsel, when required during complex negotiations.

STANDARD: Investigators and other concerned individuals are consulted/informed during the negotiation.

STANDARD: The institution has policies and procedures to assure compliance with national policy requirements, e.g. Export Controls, Nondiscrimination, etc.

ii. Ancillary Agreements Associated with Research Grants and Contracts

Prior to acceptance, the institution evaluates any sponsor restrictions in light of campus policies and other existing projects. The review includes all agreements commonly associated with research, including material transfer agreements, clinical trial agreements, confidentiality, agreements, and others.

STANDARD: The institution has procedures for the review and negotiation of research and other agreements that meet all institutional policies and practices.

STANDARD: The institution takes advantage, when appropriate, of standard agreements, e.g., the Uniform Biological Material Transfer Agreement or the National Institutes of Health Simple Letter Agreement.

iii. Subawards

Incoming subawards are agreements that provide flow-through funding for a sponsored project. With incoming subawards the terms and conditions of the agreement require review as well as any restrictions that pass through from the original funding agency. An outgoing subaward is one in which the institution provides sponsored funding to a third party through the issuance of an agreement. Outgoing subawards are typically issued by a central office with the approval of the PI, and they may require negotiation with the recipient individual or organization.

STANDARD: The institution has policies and procedures for issuing subrecipient agreements and for monitoring the performance of subrecipients.

STANDARD: Policies and procedures are in place to determine whether subrecipients have established adequate management and financial systems prior to issuing subrecipient agreements.

STANDARD: Adequate documentation for the selection and approval if necessary, of the subrecipient when not named in the proposal, is prepared and maintained.

iv. Award Acceptance Process

The institution has a process in place that allows the formal acceptance of a sponsored award by designated individuals or offices. In some cases that may be the negotiation and signing of a bilateral agreement. In others, acceptance occurs when the institution begins to spend the funds provided.

STANDARD: The institution has a system to review proposed award terms and conditions and to negotiate those terms in accordance with institutional standards prior to award acceptance.

STANDARD: The institution has written procedures for review of award documents prior to acceptance.

STANDARD: Award budgets are compared to proposal budgets and amended budgets or scopes of work are submitted when awards have been significantly reduced from requested amounts.

STANDARD: The institution does not make funds available until compliance requirements are satisfied (e.g., human subjects committee approvals, conflicts of interest disclosures, etc.).

v. Award Activation and Notification

Activation is the process by which a sponsored award is placed in the accounting system and made available to the principal investigator for expenditures. The notification process delineates the steps followed to make all appropriate parties, such as PI and departmental staff, aware that the award has been accepted and activated by the institution.

STANDARD: The institution has developed procedures to establish awards in its accounting system in a timely manner, including receipt of electronic awards.

STANDARD: Terms and conditions of awards are distributed to principal investigators and made available to other institutional personnel, as required.

C. Award Management

i. Fiscal Management

The institution has established policies for F& A rates, cost sharing, re-budgeting, time and effort, fiscal controls, cost accounting standards, cost transfers, cash management, program income, recharge centers, procurement, and closeout.

STANDARD: The institution has policies and procedures for:

- *proposal costing and budget administration*
- *the review and submission of budget changes*
- *assessing F&A costs on external projects*
- *the review and approval of exceptions and waivers of F&A cost collection*
- *financial management systems*
- *depositing all monies on a timely basis and invest them in accordance with institutional and Federal policies and to record the receipt of revenue, to disburse cash, and to bill agencies in a timely manner*
- *establishing service and recharge centers and for reviewing rates charged by centers*
- *notifying of upcoming termination dates to appropriate offices and to ensure timely closeout of programs including submission of all sponsor required financial reports, invoices, and deliverables*
- *defining allowability of costs that are consistent with federal cost principles and other applicable standards of other sponsors*
- *justifying adequately cost transfers in a reasonable period of time*

- *applying consistently compensation costs in proposing, accumulating, and reporting those costs*
- *assuring that sponsor-imposed salary caps are in place.*
- *governing fringe benefits and the method used to account for these costs*
- *reporting payroll and effort certification*
- *purchase of goods and services*
- *procurement systems*
- *the identification, recording, managing, and reporting program income in accordance with regulations*
- *expedited purchases*

STANDARD: Staff are knowledgeable and responsible for initiation of direct charges and staff are knowledgeable and responsible for approval and payment of those charges.

STANDARD: Systems exist for:

- *distinguishing between acquisition of goods and services and subrecipient agreements*
- *providing timely close out of purchases*
- *identifying mandatory and voluntary cost sharing*
- *proposing, accumulating, and reporting of cost sharing*
- *incorporating cost sharing if required in subawards*

ii. Administrative Management

The institution has established management systems for administering awards and that encompasses prior approval, reporting, record retention, data retention, subrecipient monitoring, intellectual property, and property control.

STANDARD: There is clear communication of Intellectual Property policies and procedures for ownership and management of research data.

STANDARD: The accounting system identifies all external funded projects and the system provides appropriate review and internal controls.

STANDARD: The institution has procedures for seeking required sponsor prior approvals and for implementing federal expanded authorities.

STANDARD: The institution has policies and procedures that ensure compliance with mandated cost accounting standards, demonstrate on-going compliance with the CAS standards whether a DS-2 disclosure statement is filed or not, and ensure revisions to DS-2 are filed as required.

STANDARD: Property control policies and procedures exist for acquisition, use, and disposition of equipment, for equipment inventory, and for reporting equipment to external sponsors.

STANDARD: The institution has policies regarding responsibilities for report preparation and has procedures for submission of required reports and other deliverables.

STANDARD: Record retention policies and procedures exist for the retention and access of financial and administrative data and for responding to requests for data under relevant open records requests.

STANDARD: The institution has data retention policies regarding the retention of research records and data and has policies for responding to requests for data under Federal Freedom of Information Act.

STANDARD: Subrecipient monitoring policies and procedures for monitoring performance of subrecipients include reviewing annual A-133 audit reports from subrecipients as required.

D. Research Ethics

i. Project Integrity

The institution has policies and procedures that govern responsible conduct of research, conflict of interests, and research integrity (misconduct) and appropriate assurances of compliance.

STANDARD: The institution has a written policy that:

- *addresses treatment of allegations of research misconduct and that meets sponsor requirements*
- *assists faculty, staff, and students in determining whether and to what extent outside financial relationships and interests may conflict with their primary research and academic activities or other institutional responsibilities*

STANDARD: The institution has written procedures to:

- *manage individual financial conflicts of interest*
- *recognize the concern regarding conflict of interest in research involving human subjects identify potential financial conflicts of interest of the institution and has mechanisms in place for managing them*

ii. Human and Animal Use

The institution has systems that comply with federal and state regulations and that provide ethical protection of human subjects and for the humane care and use of animals.

STANDARD: The institution's compliance systems accommodate multiple and integrated compliance obligations and are coordinated so that oversight and approval responsibilities are linked in an effective and timely manner.

STANDARD: The institution has a written Federal-Wide Assurance with the DHHS and received approval in accordance with federal regulations.

STANDARD: The institution has access to at least one Institutional Review Board in accordance with federal regulations to review, approve, require modifications in, or disapprove, suspend or terminate research activities involving human as research subjects.

STANDARD: The institution has a system of coordination between its IRB and sponsored projects administration.

STANDARD: The institution has filed a written assurance with the DHHS and received approval thereof, and has also secured USDA registration.

STANDARD: The institution has established at least one Institutional Animal Care and Use Committee in accordance with federal regulations to review, approve, require modifications to, or disapprove, suspend or terminate activities involving animals used in research.

STANDARD: The institution has a system of coordination between its IACUC and sponsored projects administration.

STANDARD: Adequate systems are in place to track, report, and maintain compliance with the Animal Welfare Act, the Public Health Service Policy on Humane Care and Use of Laboratory Animals, and applicable occupational health regulations.

iii. Biohazards, Radiation Safety, Bioterrorism

The institution has appropriate biohazards and radiation safety, and public health security and bioterrorism systems in place.

STANDARD: The institution has adopted an environmental, health, and safety policy that meets environmental, health and safety regulatory standards in sponsored projects activities.

STANDARD: The institution has devoted adequate staffing, funding, and other resources to implement, manage and oversee its EHS system and performance.

STANDARD: The institution has created a functional organization with clear roles, responsibilities and accountabilities for regulatory compliance and oversight.

STANDARD: The institution has established an EHS management system and written policies and procedures for the scope and complexity of activities at the institution.

II. INSTITUTIONAL INFRASTRUCTURE

A. Organizational Structure

i. Operational Structure

The institution has identified offices and structures that support the sponsored programs function at both the central and departmental levels.

STANDARD: The relationships of institutional offices at both the central and departmental levels are compatible and supportive of one another.

STANDARD: Alignment is strong both between central offices and schools and departments as well as sponsors.

STANDARD: Operational relationships among other related functions is positive, such as development, human resources, travel, purchasing and procurements, information technology, and compliance functions.

STANDARD: Lines of authority and coordination of functions are clearly delineated. Roles and responsibilities are specified, particularly for key sponsor requirements, including final authority, decision-making,

ii. Staffing and Resources

The staff and financial resources necessary to support the core functions of the sponsored programs function are sufficient and consistent with its research volume and the complexity of the organization.

STANDARD: Staffing and resources are sufficient to meet the service requirements of constituents and compliance requirements of sponsors, including financial and administrative requirements.

STANDARD: Resources are sufficient to identify funding opportunities for faculty, and to provide education and training for faculty and staff, IT support, etc.

STANDARD: Sufficient formal and informal opportunities exist for the professional development of staff, in terms of continuing education, professional meetings, etc. in order to be current with sponsor requirements, effective practices, and appropriate oversight procedures.

B. Communication, Outreach, and Education

i. Communication and Outreach

The institution has established mechanisms for regular communication between faculty, central offices, and departmental staff about sponsored programs policies and procedures, expectations, roles and responsibilities, changes in policies, and risk areas.

STANDARD: There are routine and predictable means utilized to communicate institutional policies and procedures to faculty and appropriate staff. For example, sponsored programs policies may be incorporated within a body of formal organizational policy, the policies may be distributed in writing, updated on a web site, and special notices distributed by email, etc.

STANDARD: There are periodic communications to senior management and academic deans and department heads, regarding significant issues, implementation of new requirements, risk areas, assessment of staff resources, etc.

ii. Education

The institution has established programs of education for faculty including teaching and research faculty, postdocs, and graduate and undergraduate students, as appropriate, about institutional and sponsor expectations in the conduct of sponsored programs.

STANDARD: There are programs of education as appropriate for faculty, students, and staff on institutional policies and procedures, compliance issues, special risk areas, resources, points of contact, etc.

STANDARD: There are programs of education, as mandated for specific compliance requirements, such as the protection of humans and animals, bio-safety and other substantive policy requirements.

C. Compliance and Risk Assessment

i. Compliance and Risk Assessment

The institution periodically assesses sponsored programs policies and practices, and assessment of emerging risk areas.

STANDARD: There is a thorough, periodic review of the effectiveness of sponsored programs policies and procedures and the communication of the results of the reviews to institutional senior management. These programs may be conducted as internal controls, quality improvement, compliance programs, etc.

STANDARD: There is a system for monitoring new sponsor requirements, external trends in audit and compliance, and risk areas at the national level. New requirements or risk areas are addressed within institutional policies, education and outreach programs, and compliance reviews, as appropriate.

D. Electronic Research Administration

i. Systems

The institution has in place appropriate electronic information systems, and the integration of systems for proposals, financial management, human resources, education programs, and compliance reviews

STANDARD: Electronic systems are well integrated to process transactions, review and track activities, and provide required reports.

STANDARD: Systems are sufficient to integrate with Federal-wide or agency specific processes for proposal and report submission.

STANDARD: There is a sufficient level of understanding among central and departmental staff and a level of proficiency, support, and training to ensure the effective operations of the systems.

Appendix B: NCURA Peer Review Team Bios



NCURA Peer Review Program

The National Council of University Research Administrators has developed a formal system of assessment for university offices of sponsored programs, in part, from its purpose as a professional development organization. The mission of professional development organizations, like NCURA, is to provide education and training to its members as well as others within the research community. Many educational efforts implicitly, if not explicitly, provide information on effective practices, techniques for success, and models of excellence. Setting standards and identifying quality of organizational performance, therefore, are expected functions of professional development organizations. In fact, no other activity of a professional development organization may be as important as the articulation of the standards and core practices of the profession. The NCURA system of peer review was developed for this purpose.

NCURA Peer Review Team for San Diego State University

Anne R. Connolly **TEAM LEADER**

Anne R. Connolly, Certified Public Accountant, has extensive experience in senior management positions in higher education, public accounting, proprietary and non-profit health organizations. She is the Assistant Vice President, Office of Sponsored Programs, The Research Foundation of State University of New York - Central Office in Albany, NY which serves 30 campus locations that conducted \$784 in sponsored activity (FY 08). At various times in her career, she has been responsible for all aspects of post-award management, development of F&A rate proposals, export controls, effort reporting, subrecipient monitoring, sponsor audits, A-133 compliance, staff development and training, development of policies and procedures and information systems.

- At University at Albany, conducted orientation sessions for new faculty, participated in University Research Liaison Committee to improve service to faculty and to improve interdepartmental relationships.
- Developed and delivered presentations to NCURA Financial Administrators and in-house Sponsored Programs Fundamentals series.
- Attends COGR and University Connected Research Foundation meetings.
- Participated in Oracle business system implementation and upgrade, Internal Controls Evaluation, development of Web-based reports to monitor sponsored program activity.
- Former chairperson - Oracle Higher Education Special Interest Group, Grants Enhancements
- Member of Toastmasters International.
- Serves on Board of Directors of several not-for-profit organizations.

Number of Years in Research Administration: 14

Current and Prior Institutions: University of Albany, Research Foundation of SUNY

NCURA Standards Review Expertise Areas: Award Acceptance and Initiation, Award Management, Institutional Infrastructure

Christina Hansen

Christina Hansen retired in October 2009 as Assistant Vice Chancellor for the Office of Research Administration (ORA) at the University of California, Irvine.

Ms. Hansen worked 11 years at the University of California Los Angeles before transferring to UC Irvine in 1988 to head the Contract and Grant Administration office. Now called the Office of Research Administration, ORA managed contract and grant awards totaling \$318 million (FY 2009) in addition to coordinating the regulatory review processes. ORA staff supports the Research Administration Management Program (RAMP), a certificated program educating departmental staff and others on essential grant and contract functions.

Ms. Hansen was a member of the UCI HIPAA Task Force, the Whistleblower Investigations Workgroup, the Potential Conflict of Interest Task Force and the School of Medicine Research Compliance Committee. She also served on the University of California Systemwide Research Compliance Advisory Committee and was a member of the Board of Directors of the Council on Governmental Relations.

She was a frequent presenter of contract and grant-related courses, serving as faculty in four videoconferences for the National Council of University Research Administrators: "Compliance Issues for Clinical Trials," "Cost Sharing on Sponsored Projects," "Making the Right Moves in Handling Research Misconduct Allegations," and "Conflict of Interest Management." She was faculty for NCURA's intensive two-and-a-half day workshops: Fundamentals of Sponsored Projects Administration and Sponsored Projects Administration: Level II, Critical Issues in Research Administration. She is a co-author of *The Role of Research Administration*, an NCURA monograph, and was on the Editorial Advisory Board of the *Sponsored Research Administration: A Guide to Effective Strategies and Recommended Practices*.

Number of Years in Research Administration: 31

Current and Prior Institutions: University of California, Los Angeles, University of California, Irvine

NCURA Standards Review Expertise Areas: Award Acceptance and Initiation, Award Management, Research Ethics, Institutional Infrastructure

Peggy S. Lowry, NCURA Peer Review Program Coordinator

Peggy serves as the Program Coordinator for the NCURA Peer Review Program and has been involved in over 30 peer reviews of research administration offices, received evaluations of her offices, and taught national workshops on sponsored program assessment. Peggy has prepared self-study documents and participated in institutional accreditation self-studies. She authored the chapter: "Assessing the Sponsored Research Office" (NCURA/AIS *Sponsored Research Administration—A Guide to Effective Strategies and Recommended Practices*) and published: "But the Emperor Has No Clothes On! Or Assessing Your Operation with Fresh Eyes" (NCURA Newsletter).

Peggy served until 2007 as Director of Sponsored Programs and Research Compliance at Oregon State University where she oversaw sponsored programs (\$200+ million in awards), non-financial research compliance areas, and served as Conflict of Interest Officer. Since that time she leads the University's new Office of Research Integrity. Her career includes 21 years at the University of Illinois--Urbana-Champaign as Assistant Vice Chancellor for Research/Director, with 10 years as a College-level administrator, seven years in predominantly undergraduate universities: Ball State University and Murray State University in Director and Associate Director positions. At Ball State and Murray State she additionally focused on faculty development and institutional incentives for research. She served on numerous university/faculty committees, created/implemented university-wide policies, and engaged in department-central research administrator networking groups.

Peggy served on numerous national NCURA committees and twice served on their Board of Directors. She served as a NCURA national workshop faculty for Fundamentals of Research Administration and Sponsored Projects Administration Level II, Chair of the Nominating and Leadership Committee and co-Chair of the NCURA newsletter. Peggy received NCURA's national Award for Distinguished Service in Research Administration in 2006. She served several terms on the Board of Directors and received national awards from

the International Society of Research Administrators and has been a member of the Council on Governmental Relations.

Number of Years in Research Administration: 39

Current and Prior Institutions: University of Illinois at Urbana-Champaign, Oregon State University, Ball State University, Murray State University

NCURA Standard Review Expertise Areas: Proposal Development, Award Acceptance and Initiation, Research Ethics, Institutional Infrastructure

Marianne Woods

Marianne Rinaldo Woods, Ph.D., J.D., is the Senior Associate Vice President for Research Administration at the University of Texas at San Antonio and faculty in the College of Public Policy. In her current position she oversees all aspects of the research administration, including the Office for Sponsored Programs (pre-award and post-award), Office for Research Integrity and Compliance, Office for Laboratory Animal Research, Office for Contracts and Industrial Agreements, and the Office of Commercialization Alliances and Innovation.

Formerly Associate Vice President of Research at The University of Alabama, she had oversight of all aspects of research administration, including IRB, IACUC, COI, MIS compliance, pre-award, post-award and accounting research administration, technology transfer and incubator facility. She has experience developing and negotiating F&A, development of recharge centers and specialized research units, and chemical inventory systems.

Dr. Woods is a Board Member on the Council on Governmental Relations (COGR) and serves as a member of the COGR Contract and Intellectual Property Committee. She is a Board member of The University/Industry Demonstration Partnership. She is also past board member of the Biotechnology Association of Alabama; the Texas Society for Biomedical Research; and, the Alabama State EPSCoR Steering Committee.

Dr. Woods has served on the National Council of University Research Administrator's (NCURA) Board of Directors. She is the current recipient of NCURA's 2009 Outstanding Achievement in Research Administration Award. She is a past recipient of the NCURA's National Distinguished Service Award and NCURA's Region V, Distinguished Service Award. She is past co-editor of the NCURA Newsletter, and the former lead faculty on the NCURA Export Controls Seminar Series and the NCURA Fundamentals Program. She is currently lead faculty on Departmental Research Administration Fundamentals and is the lead faculty working on the development of a Mid-Level Managers On-line Tutorial on Research Administration.

Number of Years in Research Administration: 30

Current and Prior Institutions: University of Texas at San Antonio, University of Alabama, University of Texas at Arlington, University of Texas at Dallas, California State University, Long Beach, California State University, Fullerton

NCURA Standards Review Expertise Areas: Proposal Development, Award Acceptance and Initiation, Award Management, Research Ethics, Institutional Infrastructure

Appendix C: Charge to the NCURA Peer Review Team



SAN DIEGO STATE
UNIVERSITY

Graduate and Research Affairs
Vice President for Research
Dean of Graduate Affairs
San Diego State University
5500 Campanile Drive
San Diego, CA 92182-8220
Tel: 619-594-2578
Fax: 619-594-3361

February 15, 2011

Ms. Peggy S. Lowry
Program Coordinator
NCURA
1225 19th Street NW
Suite 850
Washington, DC 20036

Dear Ms. Lowry:

San Diego State University requests that NCURA participate in a peer review of the University's Research Foundation (RF) and its Division of Research Affairs (DRA). This is a periodic event that has been carried out by the SDSU Senate (2001), the SDSU administration (2006), and now by the University Research Council.

Research at SDSU has taken an uncommon historical course, as has its management. California's Master Plan for Higher Education does not include independent Ph.D. training and research in the mission of the 23-university CSU system, of which SDSU is a part. Nonetheless, research has become a valued component of academic life at SDSU, as manifested in the following recognition:

- SDSU is classified by the Carnegie Foundation as a "Research University with High Research Activity." All other CSUs are classified as master's or baccalaureate institutions.
- Academic Analytics has identified SDSU as America's #1 Small Research University (fewer than 15 Ph.D. programs) for each of the past four years, based on the productivity of our faculty and that of our partners in the Ph.D. programs we share. This designation will not continue, as we have grown beyond that classification.
- The National Research Council recently rated a majority of SDSU's doctoral programs in the upper half of their disciplines, and two—clinical psychology, and language and communicative disorders—in the top 10.
- SDSU offers 19 Ph.D. programs jointly with doctoral-granting institutions in California.

Establishing a research culture within the CSU system has required an uncommon level of creativity from the SDSU faculty, its administrators, and from the Research Foundation. State funds are not allocated for the construction of research space, so it must either be rented from the University (if on campus) or provided by

THE CALIFORNIA STATE UNIVERSITIES • BAJOZFIELD • OSAYHIL ISLANDS • CHCO • DOMINGUEZ HILLS • EAST BAY • FRESNO • FULLERTON • HEIMBOLD • LONG BEACH • LOS ANGELES
MARITIME ACADEMY • MONTEREY BAY • NORTHBRECK • POMONA • SACRAMENTO • SAN BERNARDINO • SAN DIEGO • SAN FRANCISCO • SAN JOSE • SAN JUAN ORTIZ • SAN MARCOS • SONOMA • STANISLAIS

the Research Foundation (off campus). Nearly two-thirds of funded research is carried out in the million gross square feet of RF-owned space.

The salaries of faculty members engaged in funded research are another area where the CSU system is unique. Because research is not included in our mission, faculty who are funded for their research are eligible for additional compensation through two related mechanisms. These may be compounded and added to the summer salary that the faculty member may command.

Also, state funds provide for instructional-level, not research-level, equipment. The more sophisticated items our researchers need, and their maintenance, must be acquired and managed from direct and indirect costs from extramural funds.

Finally, the personnel involved in the research enterprise, a number ranging well into the thousands each year, are employed largely through the RF, requiring a substantial investment in managing human resources. As a corollary of this activity, there are typically no state-funded positions within departments to support faculty research.

Thus, the Research Foundation—a 501(c)(3) non-profit corporation—has assumed roles that transcend those of the typical Office of Sponsored Programs. The requirements of this enlarged portfolio have resulted in the development of independent financial and administrative systems within the Research Foundation.

Such an extensive commitment to the University's research effort results in outcomes that are not neatly comparable to those at other institutions. The RF needs the resources to administer these several offices. A large majority comes from Facilities and Administration costs, but a critical margin is provided by lease payments from commercial tenants in RF space, and from financial services the RF provides to other units on campus. The RF operates as a corporation dedicated to the welfare of SDSU's research effort, and its quasi-independence has been instrumental in permitting research to flourish on this campus.

This relationship has also raised issues among Principal Investigators, whose concerns were the precipitating factor in calling for this review. The topics contained in NCURA's detailed description generally cover these areas, though we will provide greater specificity as we complete our self-assessment.

The review should also encompass the operations of SDSU's Division of Research Affairs on the state-supported side. Staff in the DRA are responsible for compliance issues associated with IRB, IACUC, conflict of interest, biosafety, data use agreements, export controls, and responsible conduct of research. They also promote research through internal grants and faculty recognition, technology transfer (shared with the RF), material transfer agreements, and the organization of research symposia. We would value the reviewers' perspective on the strengths and areas of potential improvement in this office.

There is one other aspect of SDSU's situation that reviewers might bear in mind. President Stephen Weber, RF Executive Director Dan Gilbreath, and I will all retire from our offices during the coming summer. There is no ominous import to this, simply a coincidence of career trajectories, but it does introduce a note of urgency in completing the review.

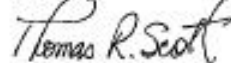
Research prospects at SDSU are similar to those for most public universities in financially-hobbled states. We have achieved historic records in research support by virtue of an embedded culture of research productivity, strong faculty hiring through the middle of the past decade, and the availability of ARRA funding. We have achieved a level of recognition for our scholarship through the encomiums of the external agencies mentioned earlier and the improved ability of the University to tell that happy story to the public. It is fair to say that SDSU has never been so well-regarded, or so well-funded, for its research.

But the future is less promising. Proposals are submitted and publications made by tenure-track faculty, and they cannot be hired on transient research funds. They must come from state support, student tuition, or philanthropic endowments. While the latter two are at historic highs at SDSU, the reduction in state support has impeded our capacity to replace lost faculty and has required that we abstain from renewing contracts of temporary faculty, placing a greater teaching obligation on tenure-track faculty. This smaller and more burdened core will be hard-pressed to maintain the level of success we presently enjoy, an outcome that is typically manifested with a latency of two years. In addition, the sources of support are shrinking. Most notably, ARRA funding has ended, but the longer term concern is that the understandable pressure to rein in federal deficits has focused on the 12% of the budget that is discretionary, non-defense—the slice where academic research lives.

These matters are largely beyond our control, save for effective advocacy, and are common across the nation. What we seek from NCURA's review is a healthy investigation of those factors that we do control, with the intention of continuing to improve the environment within which our faculty conduct their scholarship.

We appreciate your willingness to advise us as we move forward.

Sincerely,



Thomas R. Scott
VP for Research and
Graduate Dean

Cc: President Stephen L. Weber
Provost Nancy A. Marlin
Executive Director Dan Gilbreath
University Research Council

**NCURA MEETING SCHEDULE
APRIL 25-27, 2011
Manchester Hall/Library Addition, Room 4450**

April 25—Day 1

- 8:00-8:30 Entrance meeting—SDSU Senior Administrators
- President Weber
 - Tom Scott, Vice President for Research
 - Sally Roush, Vice President for Business and Financial Affairs
 - Dan Gilbreath, Executive Director, SDSU Research Foundation
- 8:30-9:15 Entrance meeting—University Research Council Members
- Tom Scott, Chair
 - Wayne Beach
 - Chris Glembotski
 - Greg Harris
 - Sandy Bernstein
 - Marilee Bresciani
 - Esther Rothblum
 - Tracy Love
 - Sharan Gibson
 - Greg Talavera
 - Elizabeth Cordero
 - Jeanne Nichols
 - Doug Grotjahn
 - Gangaram Singh
 - John Weeks
- 9:15-9:30 Break
- 9:30-10:00 Research Foundation Senior Administrators
- Dan Gilbreath, Executive Director
 - Michèle Goetz, Associate Executive Director, Sponsored Research Services
 - Melinda Coil, Associate Executive Director, Finance and Operations
 - Norma Clark, Associate Executive Director, Facilities Planning & Management
- 10:00-10:30 RF Sponsored Research Services—overview
- Michèle Goetz, Associate Executive Director, Sponsored Research Services
- 10:30-10:45 Break
- 10:45-11:30 Sponsored Research Unit Directors
- Jennie Amison, Director, Sponsored Research Development
 - Renée Lechner, Director, Sponsored Research Administration
 - Sandra Nordahl, Co- Director, Contracting & Compliance
 - Gene Stein, Co- Director, Contracting & Compliance
 - Debbie Brighton, Director, Communications
 - Janet Harry, Coordinator, Sponsored Research Systems and Support

11:30 – 11:45 Break

April 25—Day 1 (*Continued*)

11:45 – 12:30 RF Sponsored Research Development (pre-award)

Development Specialists:

- April Mazon
- Andrew Nunn-Miller
- Linda Torgeson
- Jeannine Zuber
- Jeannine Zuber
- Jenna McCart, Grant Information Coordinator
- Joelle Morgan
- Jennifer Renzi
- Steven Torok

12:30 – 1:30 Working Lunch: Executive Session Review Team

1:30 -2:15 RF Contracting & Compliance

Analysts:

- Danielle Arellano-Rieger
- Lilly Rubi
- Tja Owens
- Adriana Estudillo

Sponsored Research Technicians:

- Leonie Molina
- Sheela Garimella
- Reyna Navarro
- Joey Principato
- Marlo Sanchez
- Mary Beth Narcisco
- Vi Phan
- Shoua Fang

2:15 – 2:30 Break

2:30 – 3:00 RF Sponsored Research Administration

Coordinators (post-award):

- Bonnie Brown (Sky Park Module)
- Jo Boulter (Gateway)
- Jennifer Sneed (Gateway)
- Julie Alsbrooks (Alvarado Module)
- Mary Perl (Gateway)

Coordinator (pre-award):

- Joanne Cobble (Gateway)

3:00 – 4:00 RF Sponsored Research Administration (post award)

Administrators:

- Julie Marini
- Terri Owens
- Pascheline Peter
- Amy Pinion
- Cindy Hicks
- Carolyn Martinson
- Cheryl Whittemore
- Andrea Green
- Raluca Pimenta
- Wayne Lee

- Malinda Anderson
- Adam Moeller
- Tisha Mart
- Karyna Castellanos

April 25—Day 1 (*Continued*)

- Susan Newman
- Brahman Gnad
- Laura Gardiner
- Erika Gonzales
- Chun Ohl
- Iris Isla, Effort Reporting Analyst
- Frank Sweeney
- Raquel Kaercher
- Kim Ruff
- Rachel Stiehl
- Lisa Holman

4:00 – 4:15 Break

4:15-5:00 PI Group #1

- Doug Stow, Arts & Letters
- Sheldon Zhang, Arts & Letters
- Sharan Gibson, Education
- Guadalupe Ayala, HHS
- Susan Woodruff, HHS
- Jessica Robinson, HHS
- Jong Won Min, HHS
- Karen Emmorey, HHS
- Mark Freeman, PSFA
- Bill Tong, Sciences
- Patrick Papin, Sciences
- James Lange, Student Affairs

5:00 Conclude

April 26—Day 2

8:00-8:30 Research Affairs overview. Responsibility as director of compliance group functions including topics not addressed in scheduled meetings to include RCR, Research Integrity/Misconduct, and Export Control

- Camille Nebeker, Director, Division of Research Affairs

8:30-9:15 Division of Research Affairs staff

- Amy McDaniel, Regulatory Compliance Analyst
- Brianne Mongeon, Regulatory Compliance Analyst
- Christine Cook, Regulatory Compliance Analyst
- Choya Washington, Regulatory Compliance Analyst
- Melissa Camarena, Research Services Coordinator

9:15-9:30 Break

9:30-10:15 Institutional Animal Care & Use Committee (IACUC)
Office of Laboratory Animal Care (OLAC)

- Greg Harris, Chair
- Millie Tran, Biosafety Officer
- Tony Slimp, OLAC Manager
- Kent Osborn, attending veterinarian

- Christine Cook, DRA Analyst

April 26—Day 2 (Continued)

	Institutional Biosafety Committee
	<ul style="list-style-type: none"> • Chris Glembotski, Chair • Millie Tran, Biosafety Officer • Sheryl Mansour, Assistant Biosafety Officer • Christine Cook, DRA analyst
10:15 – 10:30	Break
10:30 -11:00	Conflict of Interest
	<ul style="list-style-type: none"> • Camille Nebeker, Director, Division of Research Affairs
11:00 - 11:45	PI Group #2
	<ul style="list-style-type: none"> • Seth Mallios, Arts & Letters • Brian Finch, Arts & Letters • Rand German, Engineering • Fatih Buyuksonmez, Engineering • Julia Evans, HHS • Tracy Love, HHS • Robert Seidman, HHS • Lew Shapiro, HHS • Audrey Schillington, HHS • Thomas Novotny, HHS • Wayne Beach, PSFA • Usha Sinha, Sciences • Terry Cronan, Sciences • Peter Salamon, Sciences • Bob Zeller, Sciences • Allen Shafter, Sciences • Barry Hanan, Sciences • Linda Gallo, Sciences • Tom Zink, Sciences • Forest Rohwer, Sciences
11:45-12:45	Working Lunch: Executive Session Review Team
12:20 – 12:40	Debbie Brighton, Director, Communications Jenna McCart, Grant Information Coordinator
12:45-1:30	Institutional Review Board (IRB)
	<ul style="list-style-type: none"> • Jeanne Nichols, Chair • Amy McDaniel, Regulatory Compliance Analyst • Choya Washington, Regulatory Compliance Analyst • Brianne Mongeon, Regulatory Compliance Analyst
1:30 – 1:45	Break

1:45 – 2:15 RF Communications, Research Advancement, SDSU University Relations & Development

- Debbie Brighton, Director, Communications
- Barry Janov, Director, Sponsored Research Program Management
- Greg Block, Director of Media Relations & New Media

2:15 – 3:00 SDSU Deans

- Linda Holler, Associate Dean, Arts & Letters
- Gail Naughton, Dean, Business
- Ric Hovda, Dean, Education

April 26—Day 2 (*Continued*)

- David Hayhurst, Dean, Engineering
- Stephen Williams, Associate Dean, Health & Human Services
- David Pearson, Dean, Imperial Valley Campus
- Kathy LaMaster, Associate Dean, Professional Studies & Fine Arts
- Stanley Maloy, Dean, Sciences

3:00-3:15 Break

3:15 – 4:00 Environmental Health & Safety (EH&S) select agents, diving safety, occupational health, chemical safety, radiation/laser safety, laboratory safety

- Terry Gee, EH&S Director
- Millie Tran, Biosafety Officer
- Mitch Lanahan, Radiation Safety Officer
- Matt Edwards, Chair, Diving Control Board
- Mike Anghera, Diving Safety Officer

4:00 – 4:15 Break

4:15 – 5:00 Center Directors

- | | |
|-----------------------------|-------------------------------|
| • Sandy Ehrlich, Business | • John Elder, HHS |
| • Caren Sax, Education | • Loring Jones, HHS |
| • Randy Philipp, Education | • Elizabeth Klonoff, Sciences |
| • Asfaw Beyene, Engineering | • Eric Frost, Sciences |
| • John Clapp, HHS | • Jose Castillo, Sciences |
| • Suzanne Lindsay, HHS | • Roberta Gottlieb, Sciences |

5:00 Conclude

April 27—Day 3

8:00-8:30 Sponsored Research Facilities

- Norma Clark, Associate Executive Director, Facilities Planning & Management

- 8:30 – 9:15 RF CFO
- Melinda Coil, CFO
 - Rachel Raynoha, Director, Computing Services
 - Rich Rechif, Director, Financial Management
 - Erik Davidson, Director, Investments & Financial Reporting
 - John Borchert, Manager, Financial Systems
 - Katherine Ivko, Manager, Accounts Payable & Payroll
 - Denise Carroll, Manager, Purchasing
 - Rachel Lancaster, Manager, Finance & Accounting

April 27—Day 3 (*Continued*)

- 9:15 – 9:30 Break
- 9:30-10:00 Risk Management
- Bob Brown, Director, Human Resources & Risk Management
- 10:00 – 10:15 Break
- 10:15-11:00 PI Group #3
- | | |
|---|---|
| <ul style="list-style-type: none"> • Lynn Shore, Business • Michael Gates, HHS • Mark Reed, HHS • Henrike Blumenfeld, HHS | <ul style="list-style-type: none"> • Rob Edwards, Sciences • Ricardo Zayas, Sciences • Rebecca Lewison, Sciences • Elizabeth Cordero, IVC |
|---|---|
- 11:00 – 11:15 Break
- 11:15 – 11:45 Internal Audit
- Scott Burns, Associate Vice President, Financial Operations
 - Valerie Carter, Audit & Tax Director
- 11:45 – 2:00 Working Lunch: Executive Session Review Team
- 2:00-3:00 Exit meeting—SDSU Senior Administrators
- President Weber
 - Tom Scott, Vice President for Research
 - Sally Roush, Vice President for Business and Financial Affairs
 - Dan Gilbreath, Executive Director, SDSU Research Foundation
- 3:00-3:30 Break
- 3:30-5:00 Exit meeting—University Research Council
- | | |
|---|--|
| <ul style="list-style-type: none"> • Tom Scott, Chair • Susan Levy • Esther Rothblum | <ul style="list-style-type: none"> • Sharan Gibson • John Clapp • Elizabeth Cordero |
|---|--|

- Greg Harris
- Sandy Bernstein
- Marilee Bresciani

- Wayne Beach
- Gangaram Singh

5:00

Conclude

Appendix E NCURA Professional Development Resources



A number of NCURA resources are valuable to the institution and serve to enhance professional development of departmental, college, and central research administrators. All of the NCURA educational offerings go through a rigorous evaluation process to insure the quality of the program. Presenters are carefully selected and represent experienced research administrators with extensive understanding of the profession. The following list provides a selection of professional development resources that may be referenced in this Review Report and may be valuable for the institution to consider.

NCURA Traveling Workshops

NCURA'S four traveling workshops are scheduled at locations around the country or can be hosted by your own institution. They serve as an excellent foundation for new staff, or as a refresher for more experienced staff. When hosted by your own institution, they serve to offer a broad-based and consistent knowledge sharing across the institution. To bring this resource to your institution, you need to have a minimum of 60 participants (central, departmental, center/college) and can include research administrators from neighboring institutions. These workshops are taught by experienced research administrators and the curriculum reflects the critical issues for training and professional development. Our four national workshop topics are: Departmental Research administration Workshop, Financial Research Administration Workshop, Fundamentals of Sponsored Project Administration, and Sponsored Project Administration II. http://www.ncura.edu/content/educational_programs/workshops/

NCURA TV

Each year, NCURA offers a series of TV broadcasts on critical issues of importance to sponsored program operations. Recent years have included such topics as audits, cost sharing, subrecipient monitoring, issues for the department administrator, and non-financial research compliance. These TV broadcasts, which can be viewed live or purchased as a DVD, provides excellent training opportunities within the institution. http://www.ncura.edu/content/educational_programs/ncura_tv_2009/index2009.php

Online Tutorials

NCURA offers several multi-week online tutorials. These tutorials provided interactive learning activities as well as knowledge reviews for each lesson. Current tutorials are primers offered in the areas of clinical trials, federal contracting, and subawards. http://www.ncura.edu/content/educational_programs/

Webinars

A number of webinars are offered on special focus topics that are of importance to research administration. Recent topics have included export controls, contract law, and procurement cards.

Other educational resources are located at: http://www.ncura.edu/content/educational_programs/